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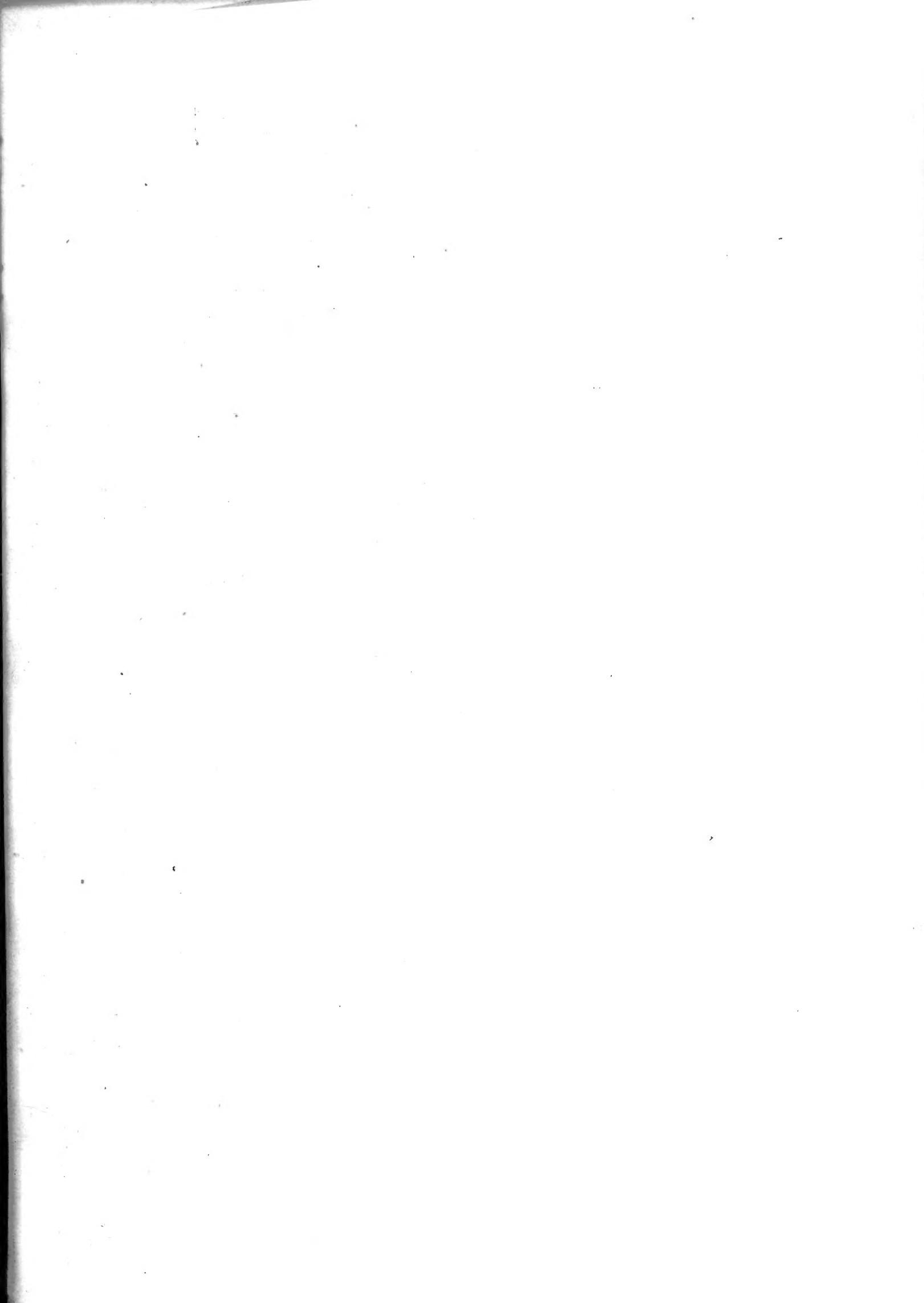
Thean Lodge, Richmond Park,
22nd May, 1886.

Dear von Haast,

With your many cares & correspondences I am not surprised that you pop a letter into a wrong envelope; in returning the inclosed. I add the pleasure with which my Sister & self look forward to welcome you and Madame von Haast to our abode tomorrow -

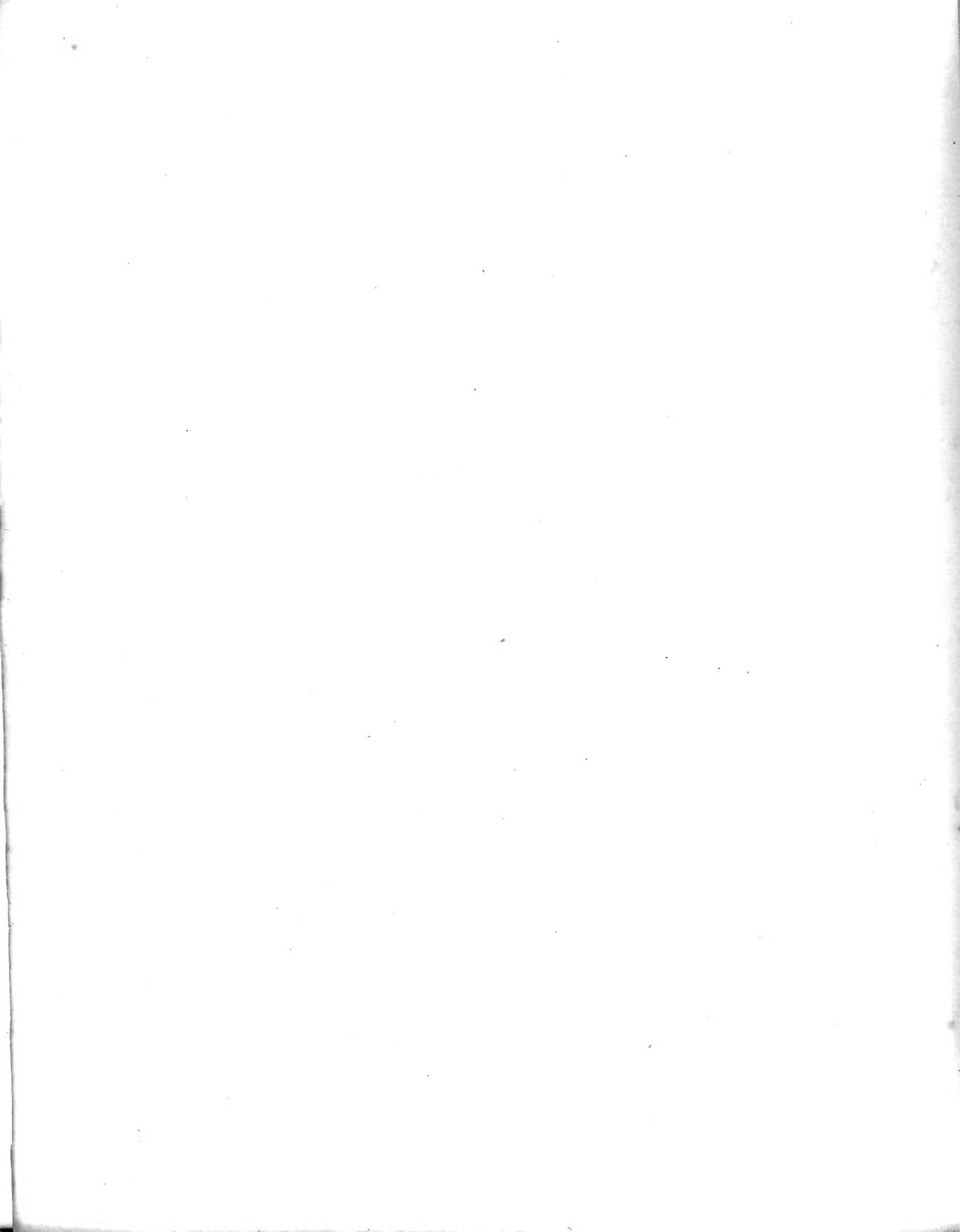
Always truly yours'

Richard Owen.



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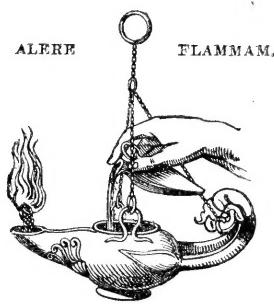


MEMOIRS
ON THE
EXTINCT WINGLESS BIRDS OF NEW ZEALAND;
WITH AN APPENDIX
ON THOSE OF
ENGLAND, AUSTRALIA, NEWFOUNDLAND, MAURITIUS, AND RODRIGUEZ.

BY
RICHARD OWEN, C.B., F.R.S.
FOREIGN ASSOCIATE OF THE INSTITUTE OF FRANCE, ETC.

VOL. II. PLATES.

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ALERE

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EXTINCT WINGLESS BIRDS OF NEW ZEALAND.

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GEOLOGICAL MAP OF NEW ZEALAND.

For impressions of this Map I am indebted to the Government Geological Survey of New Zealand. On it are noted most of the localities at which the remains described in this Work have been found.



Fig. 3.



Fig. 2.

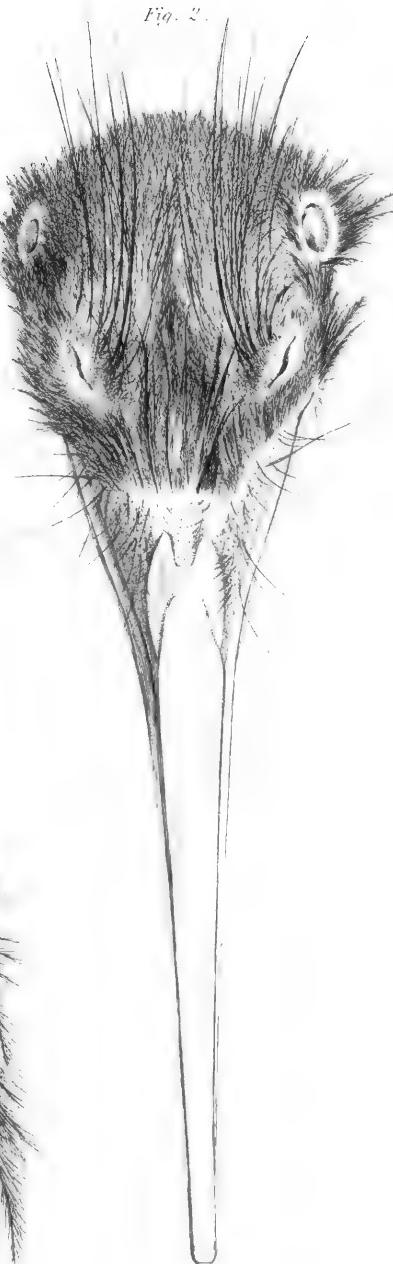


Fig. 4.

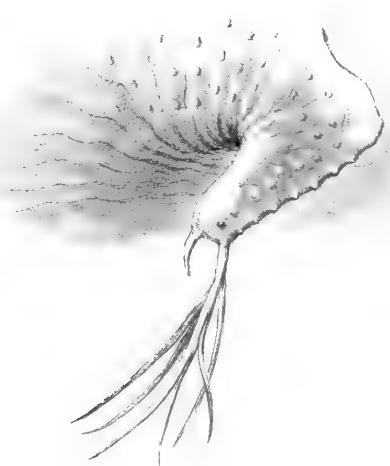
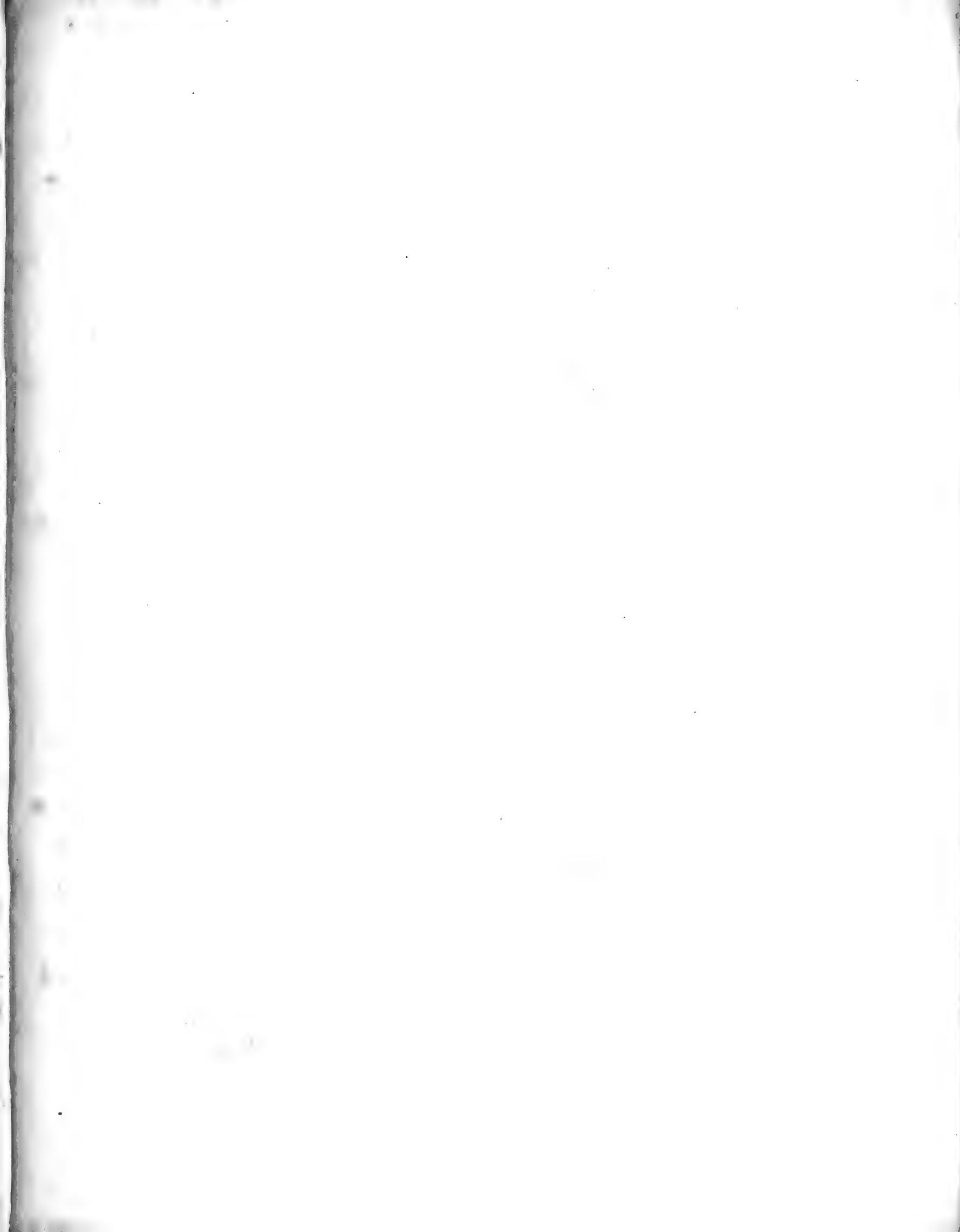


Fig. 5.







Salmo salar.

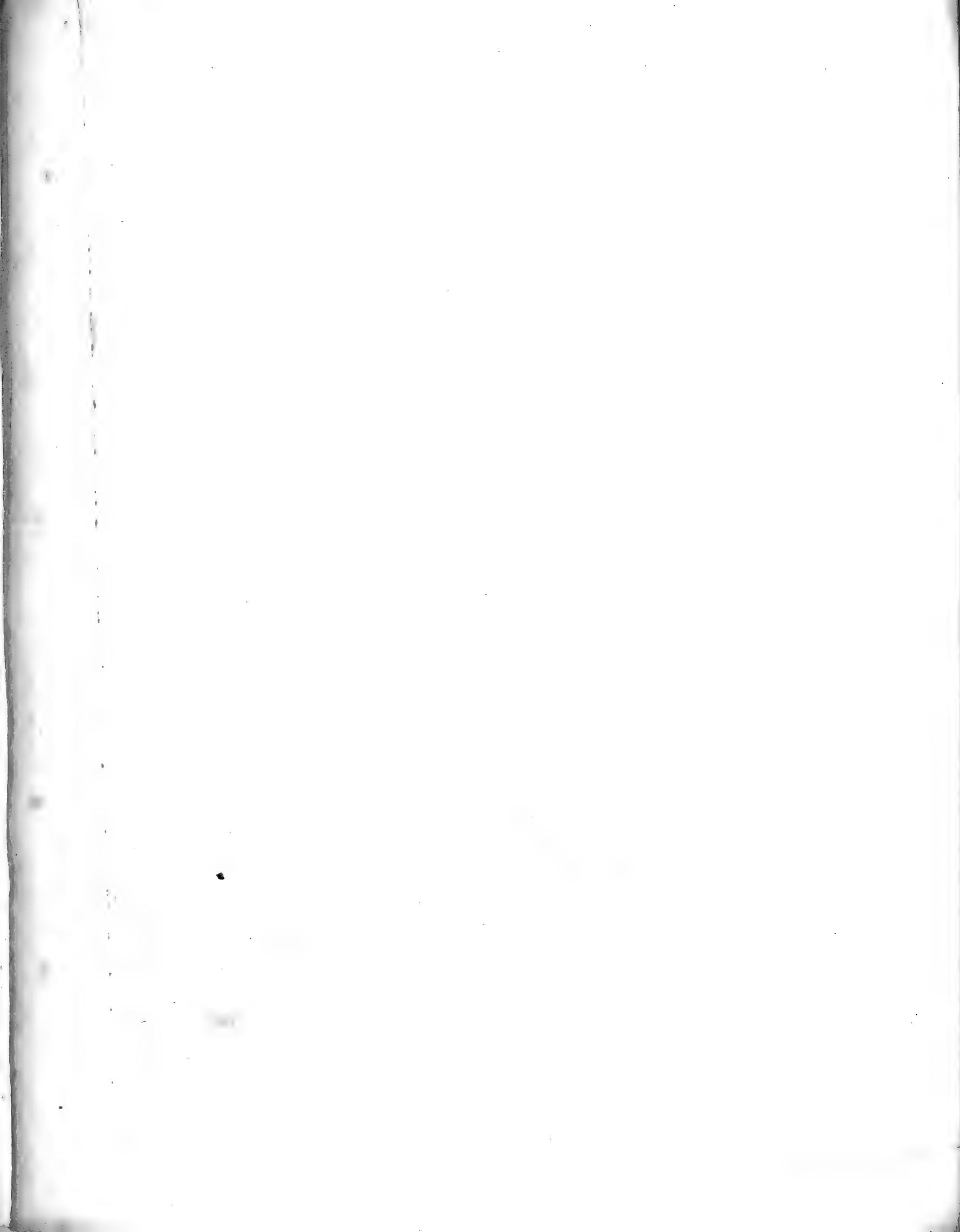
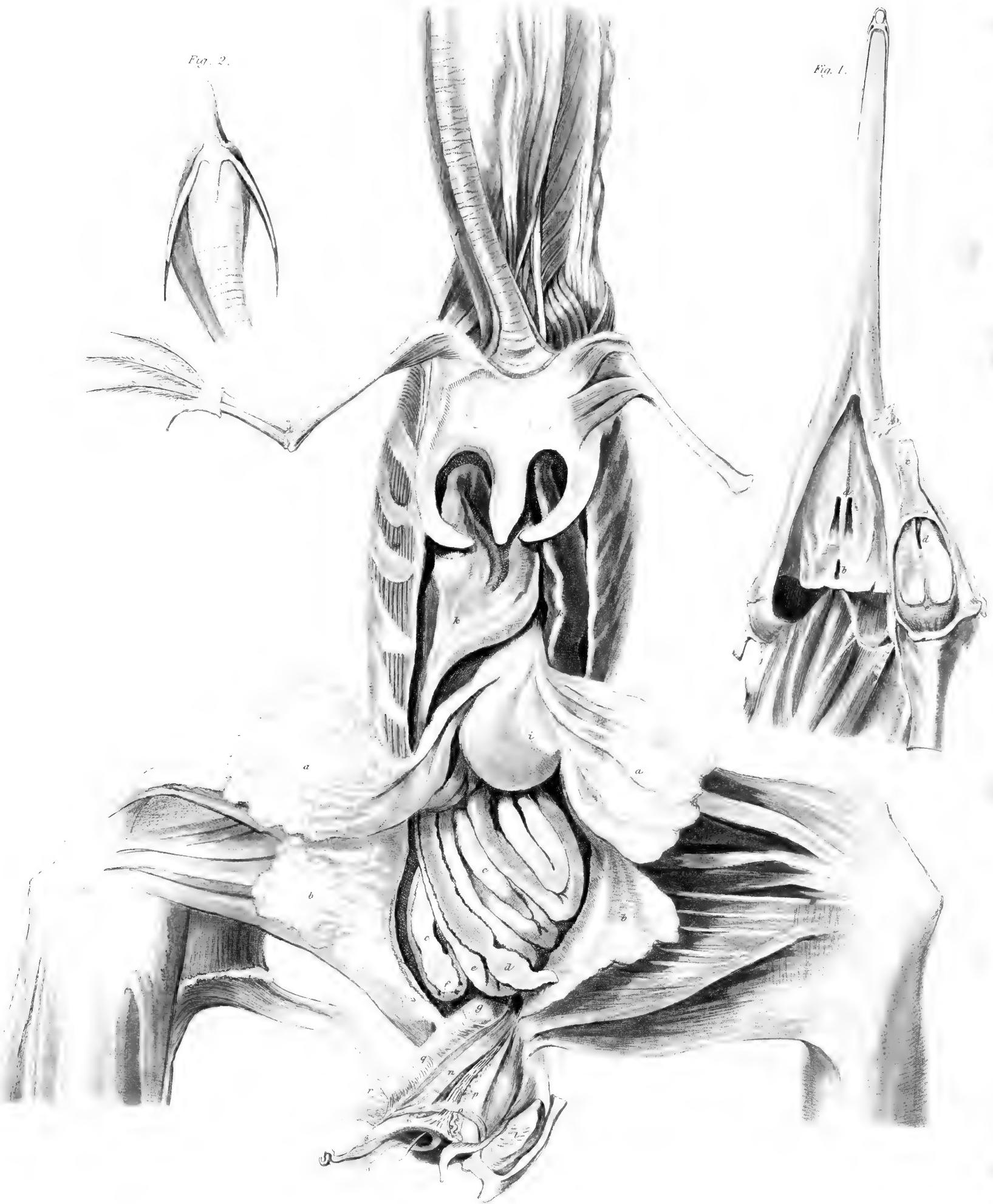
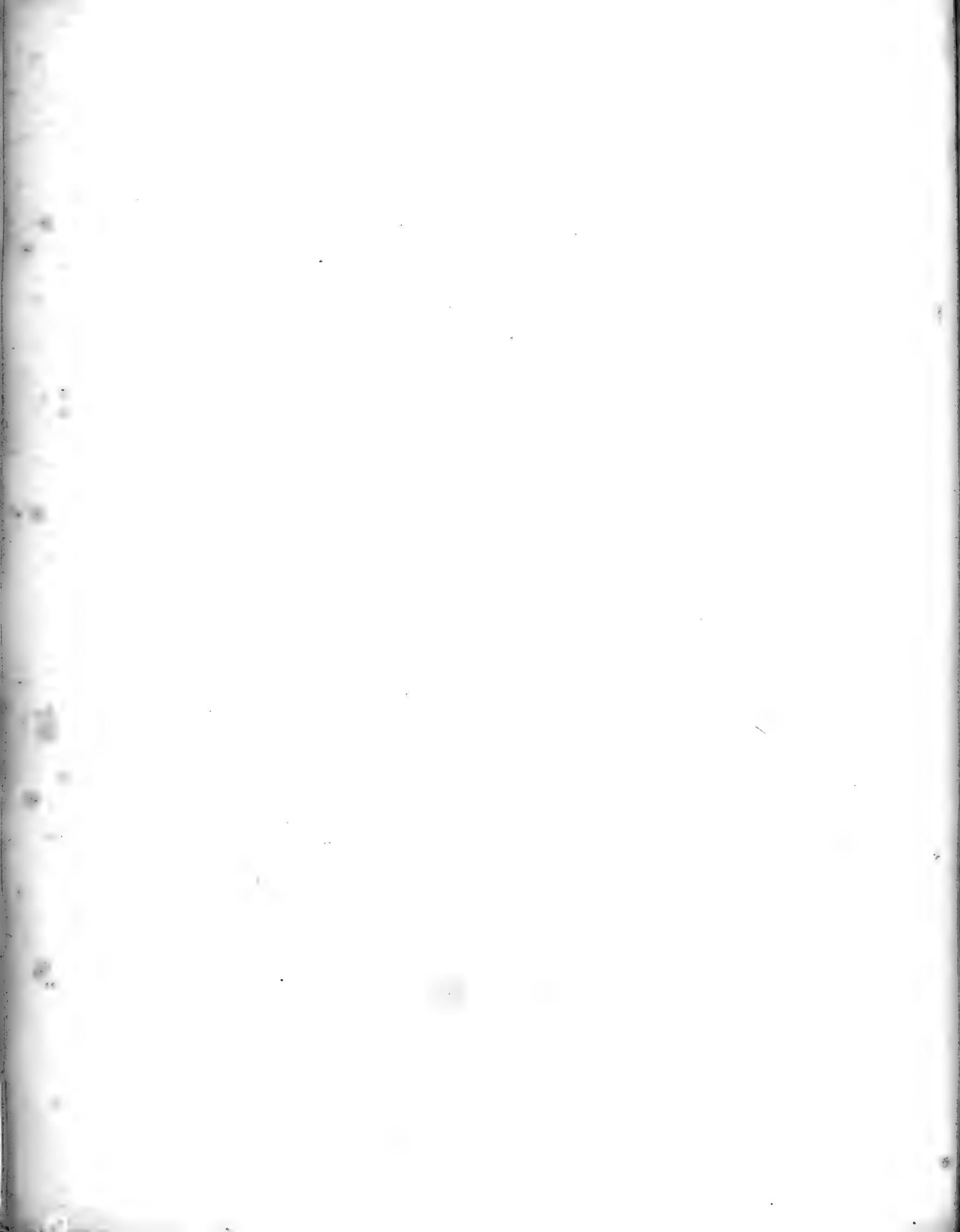


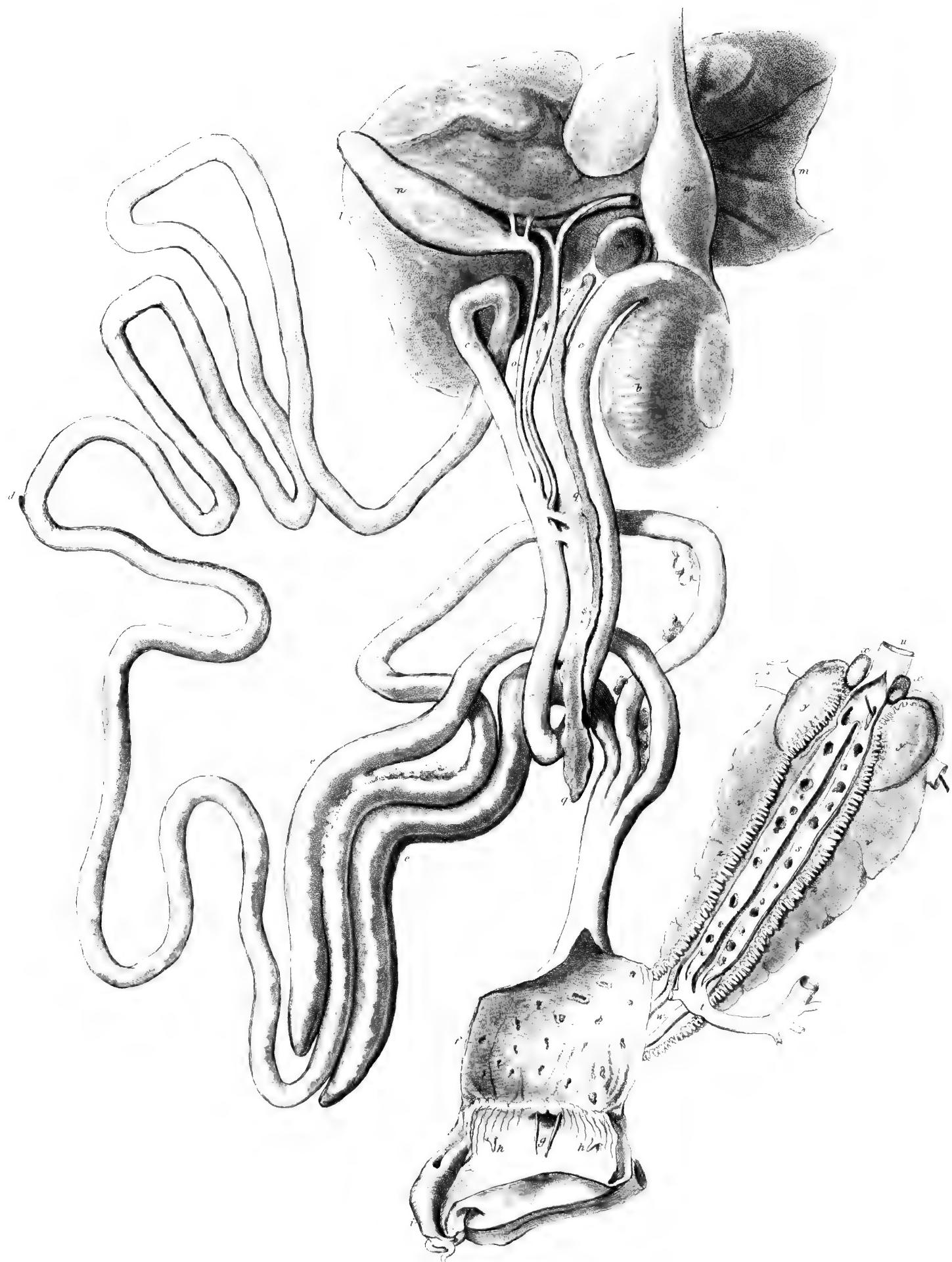
Fig. 3.

Fig. 2.

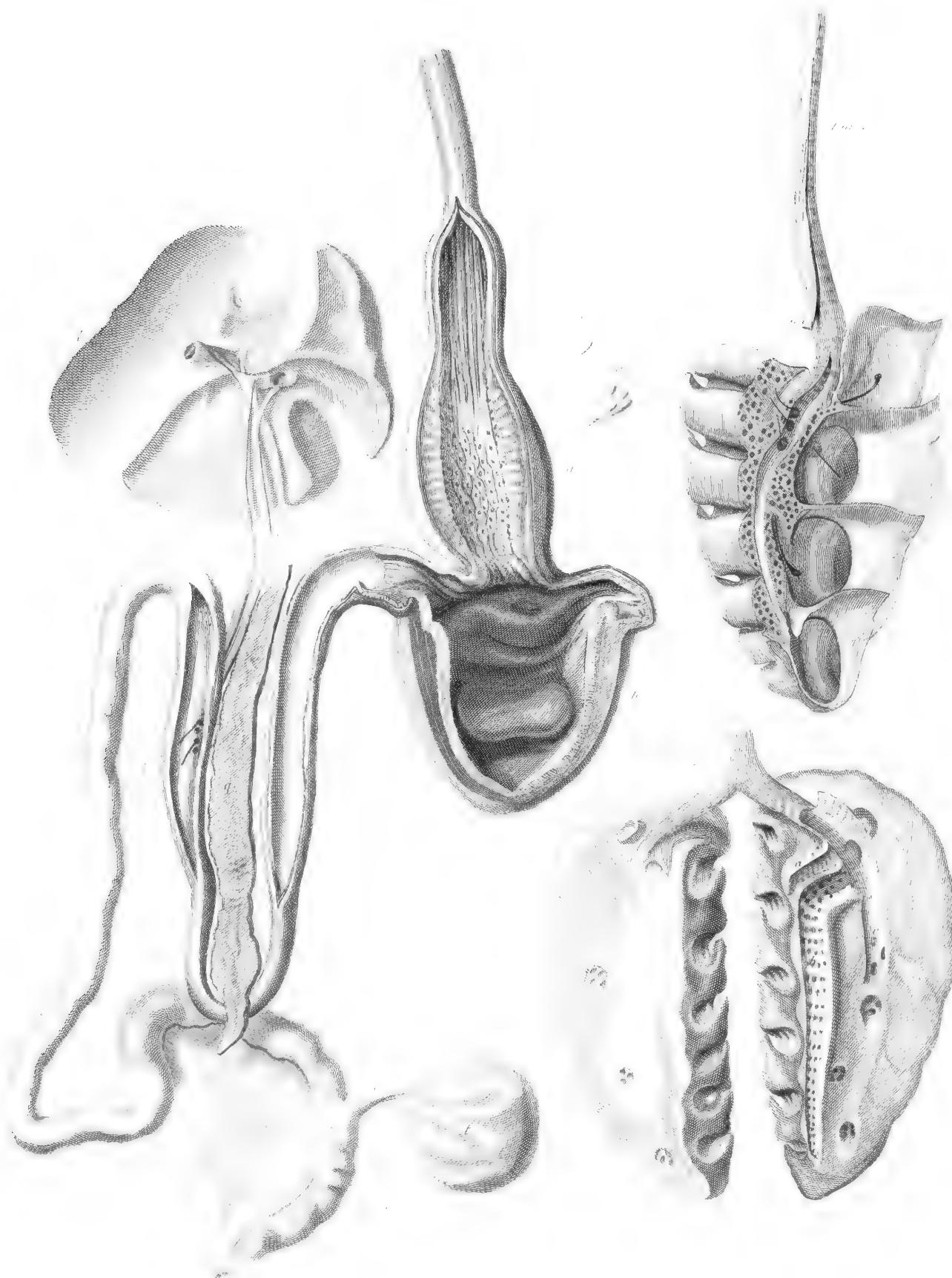
Fig. 1.







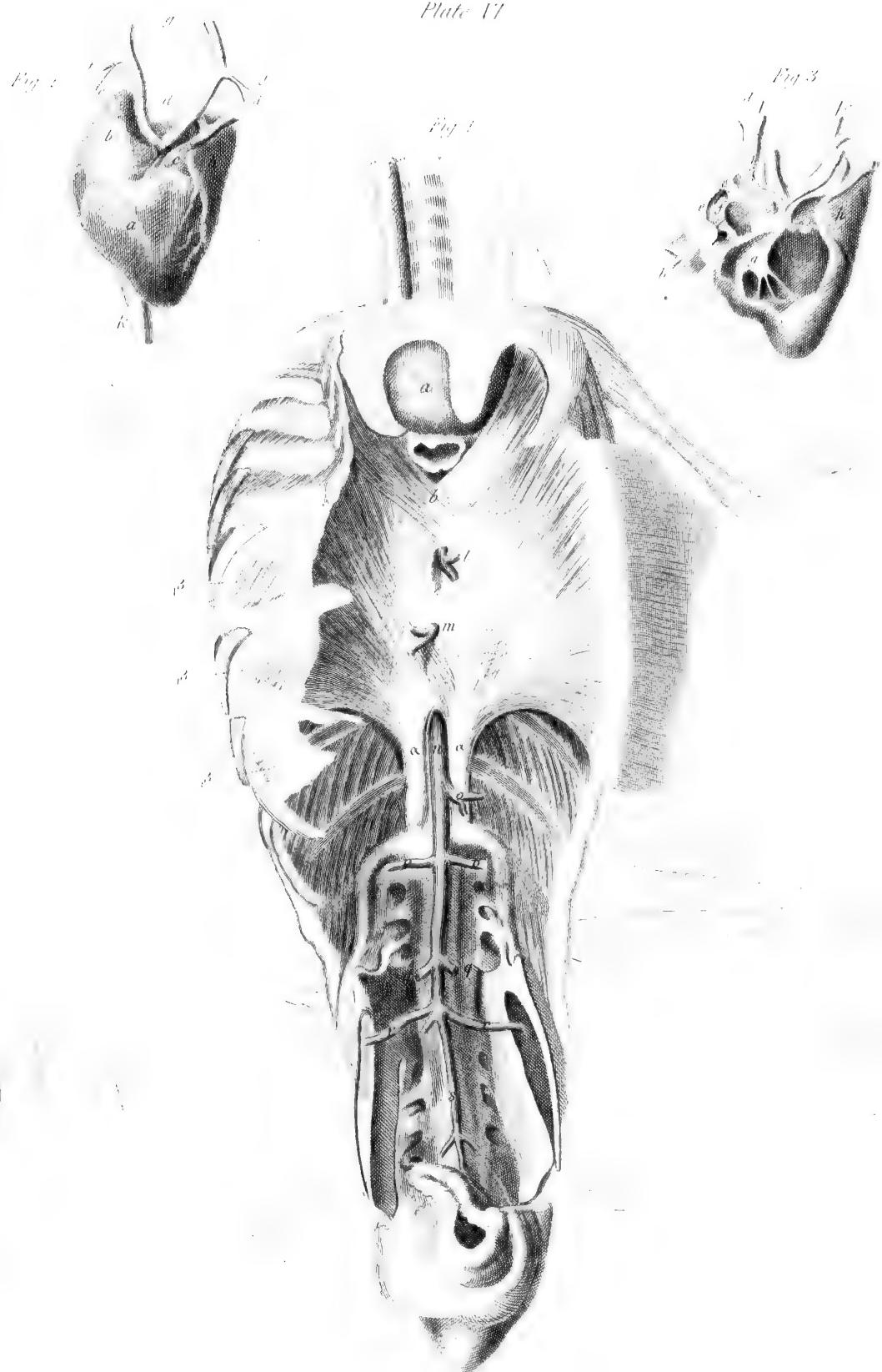




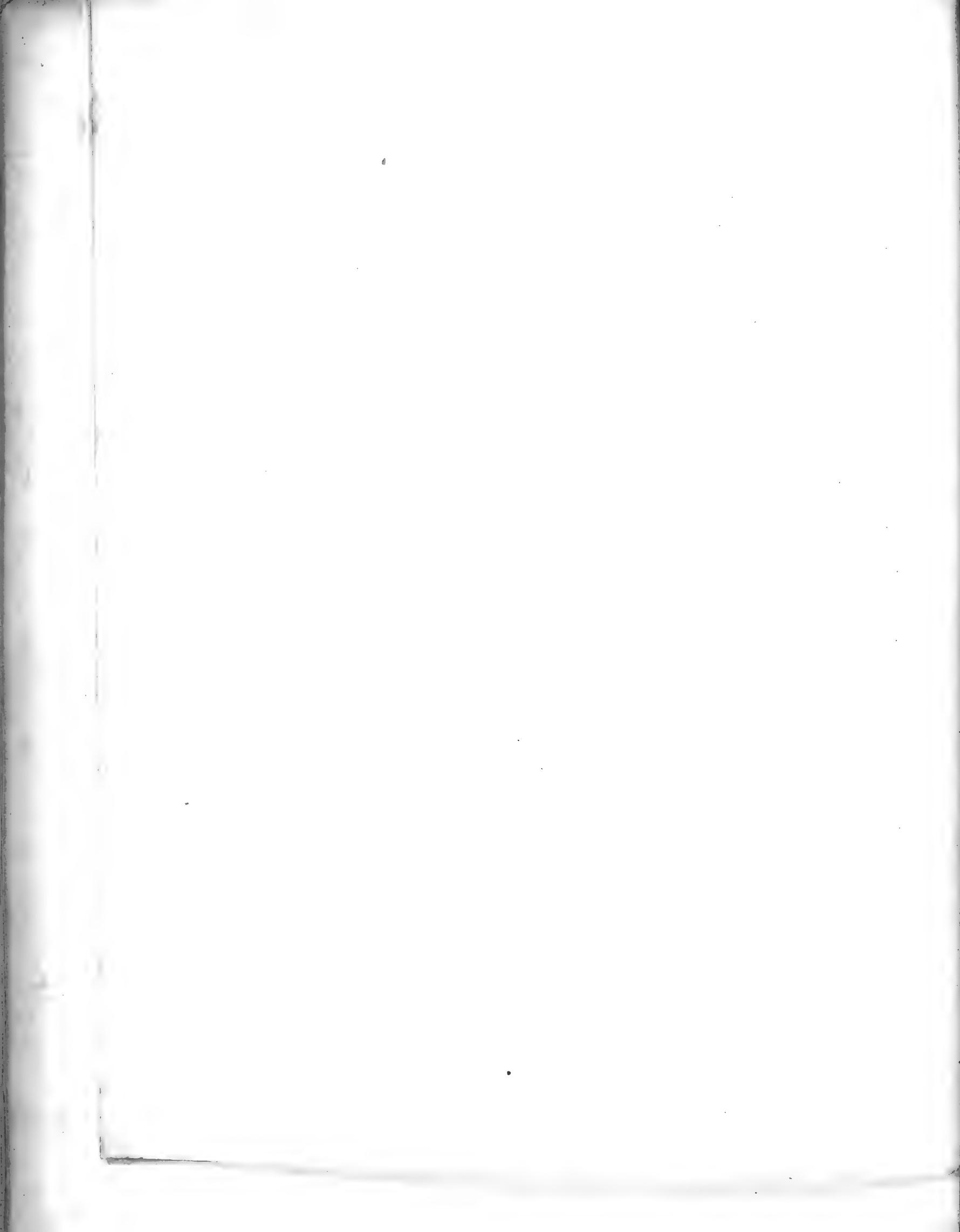
Aplopeltura ciliata



Plate 17



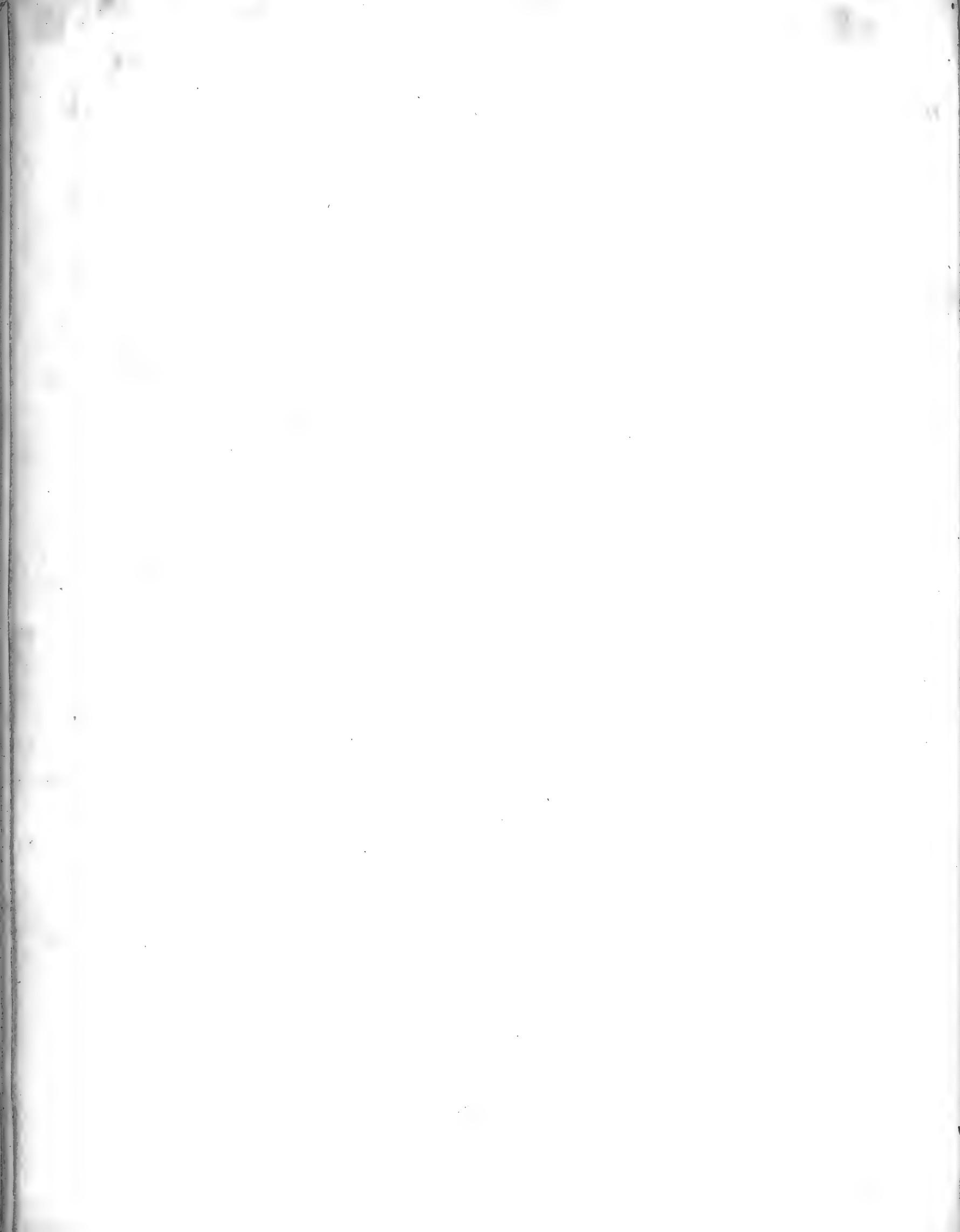
Ipteryx austriaca

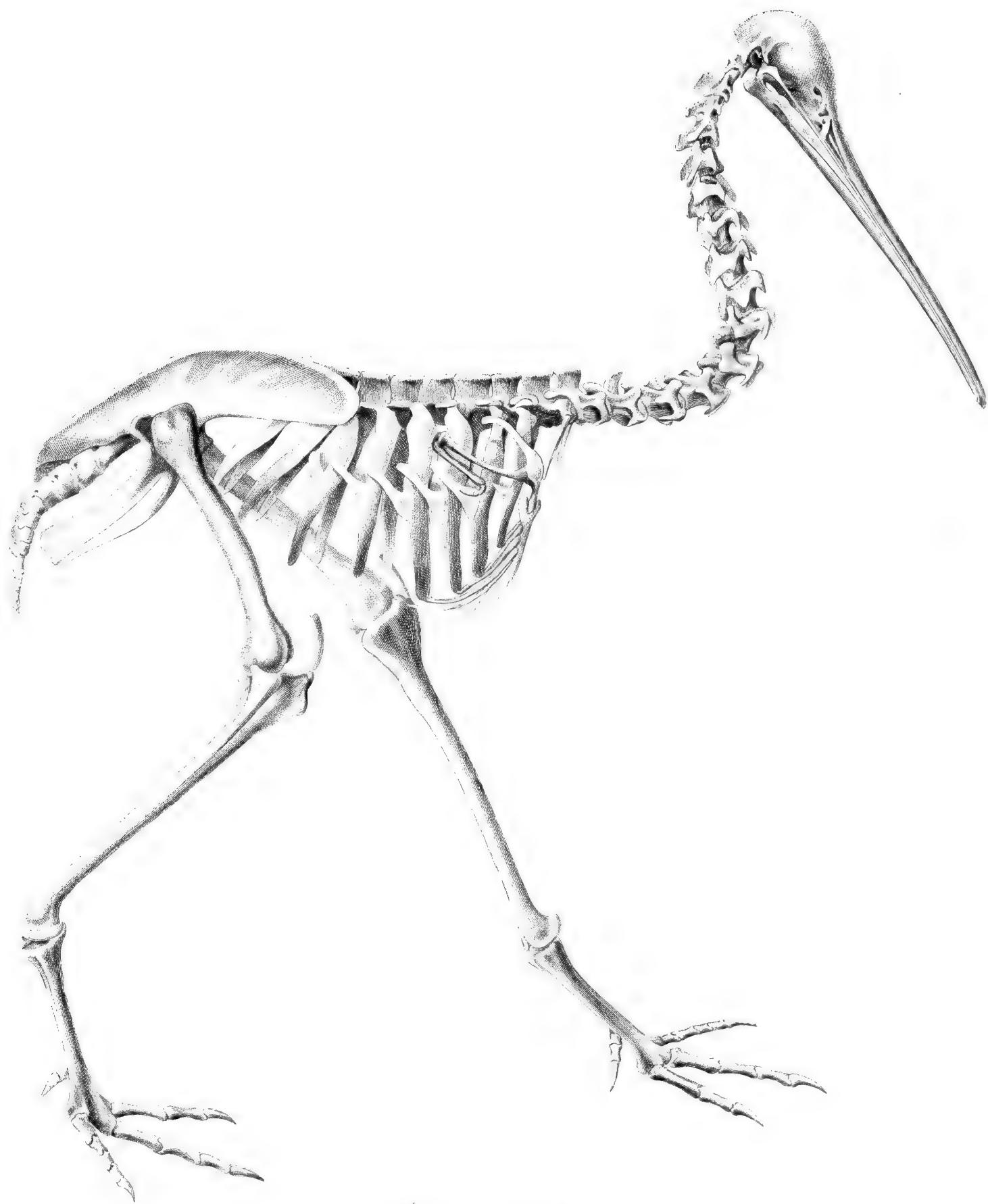


PL. VII



Fig. 1, 2, 5, 8. Pteryx. - Fig. 3, 4. This.



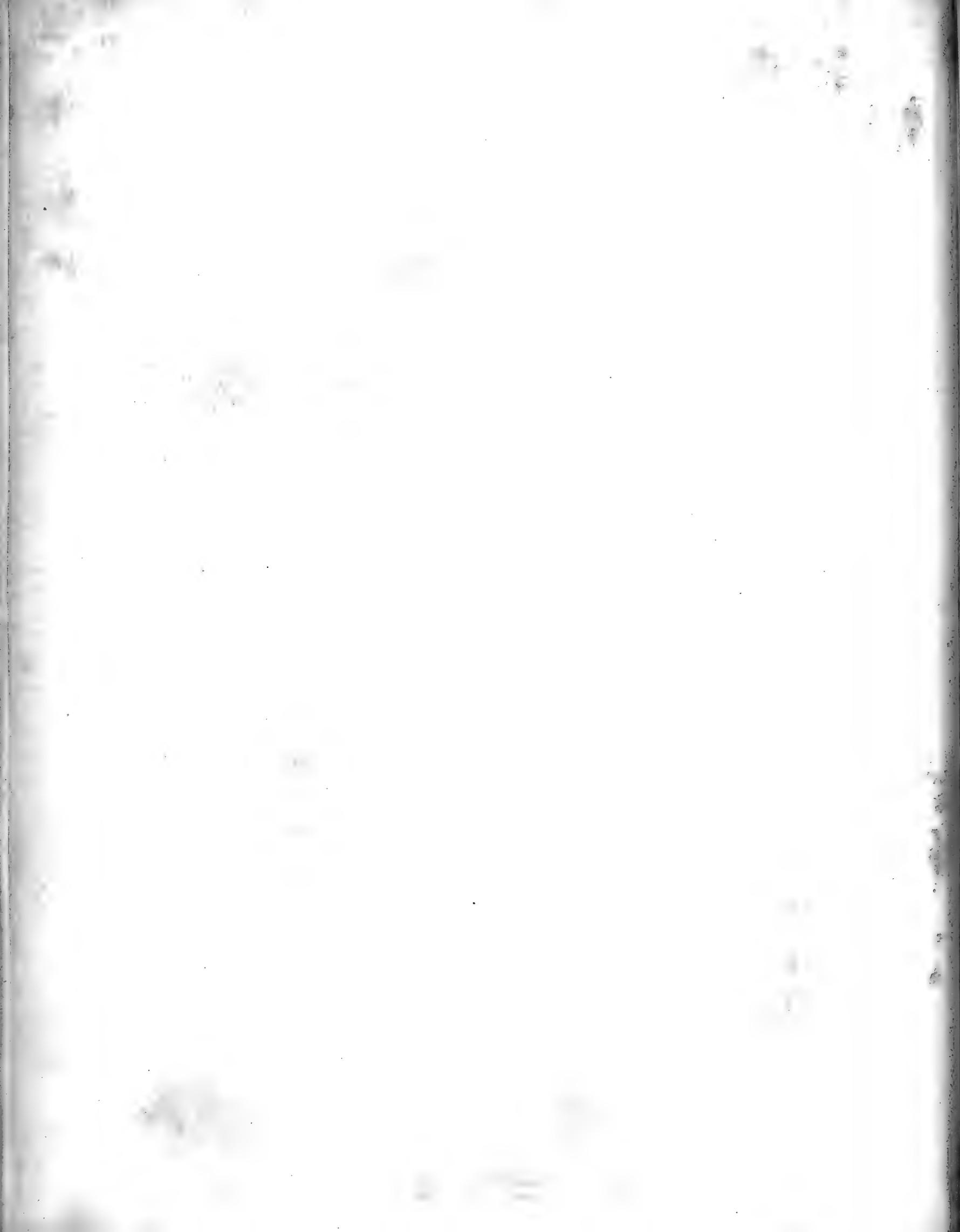


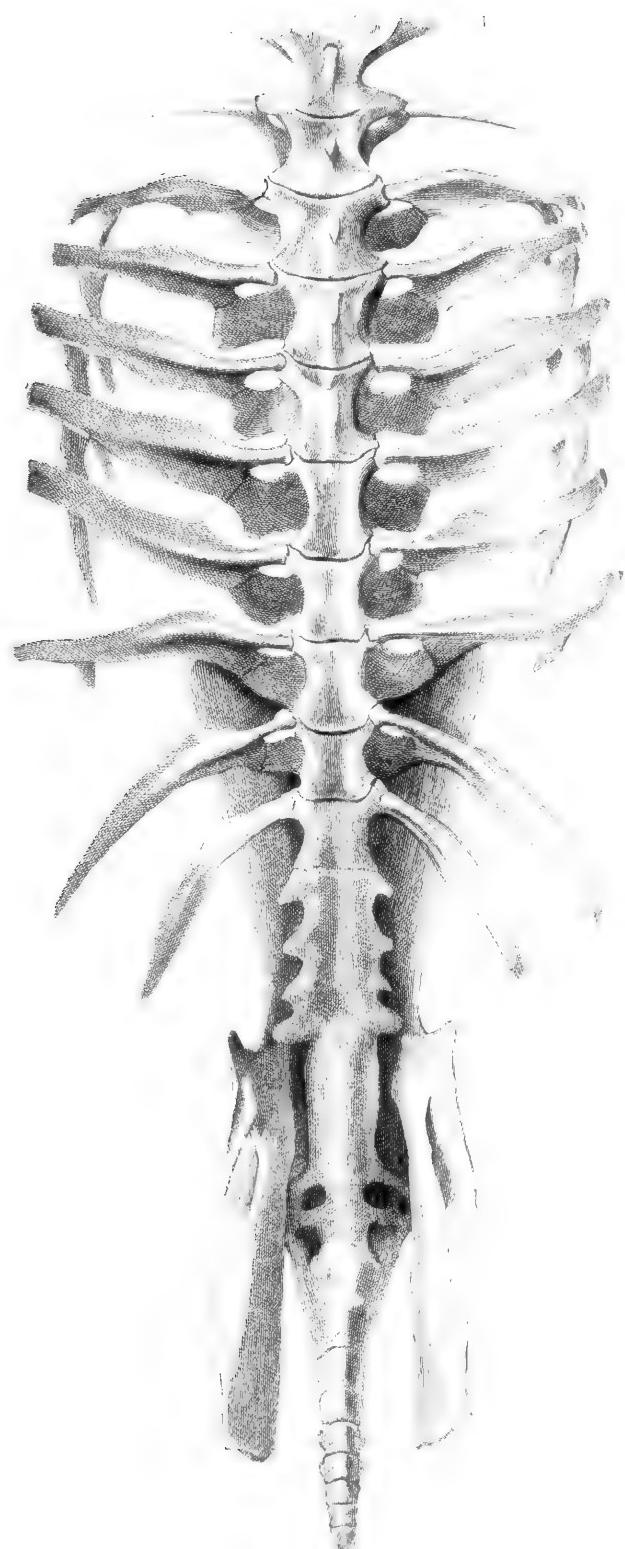
Spheniscus australis, mac.

1/2 nat. size.

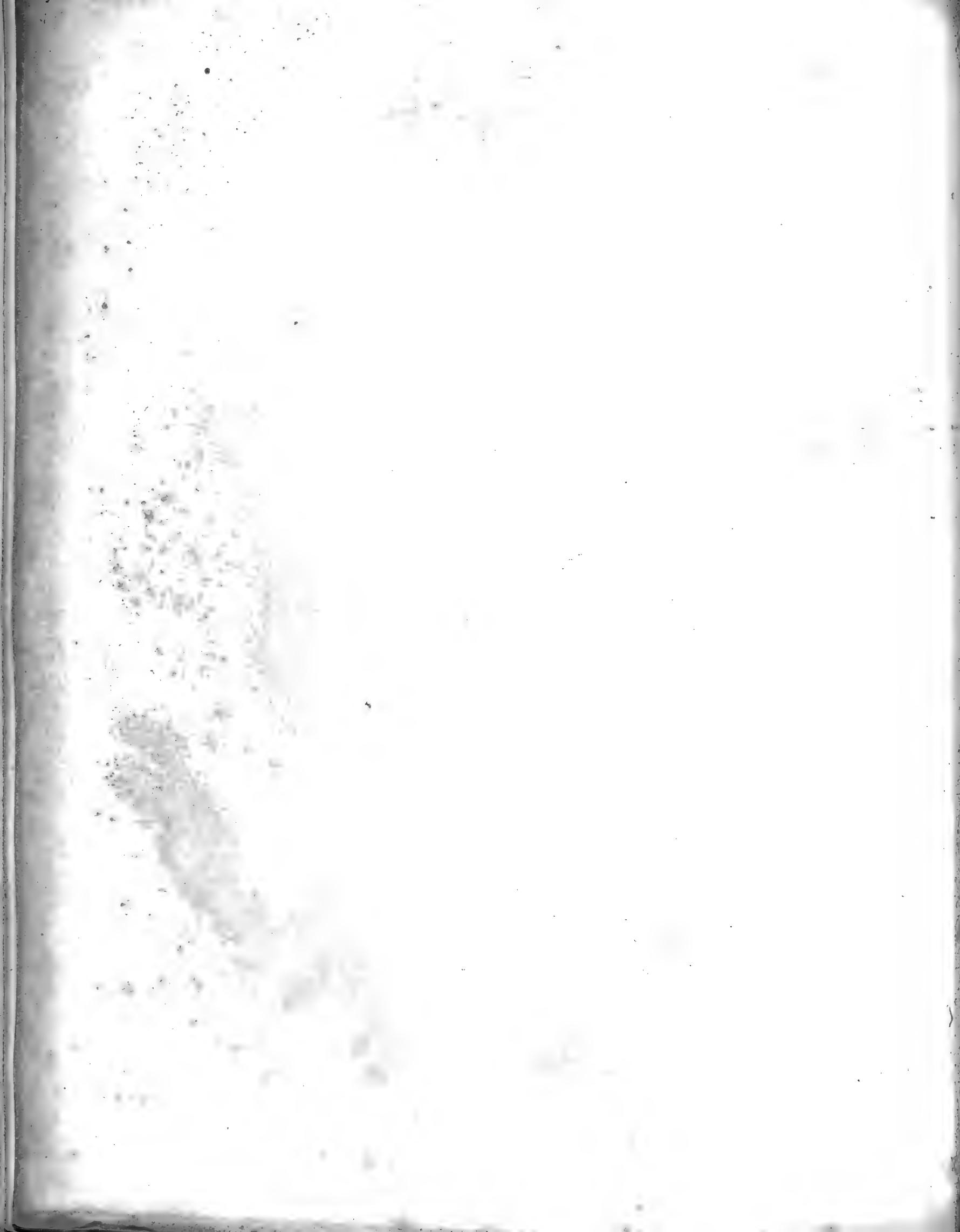
H. Sharpe del.

J. Gould.



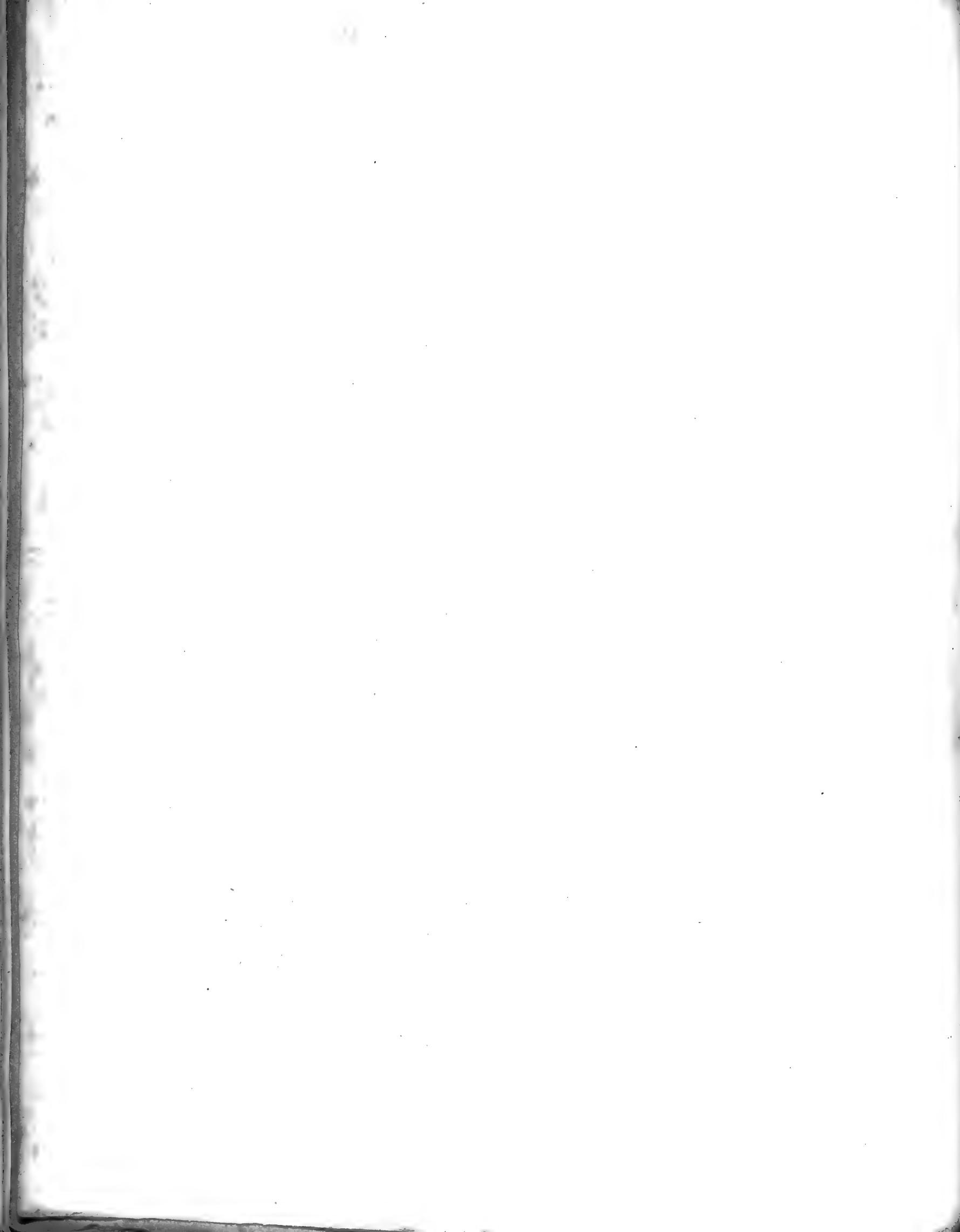


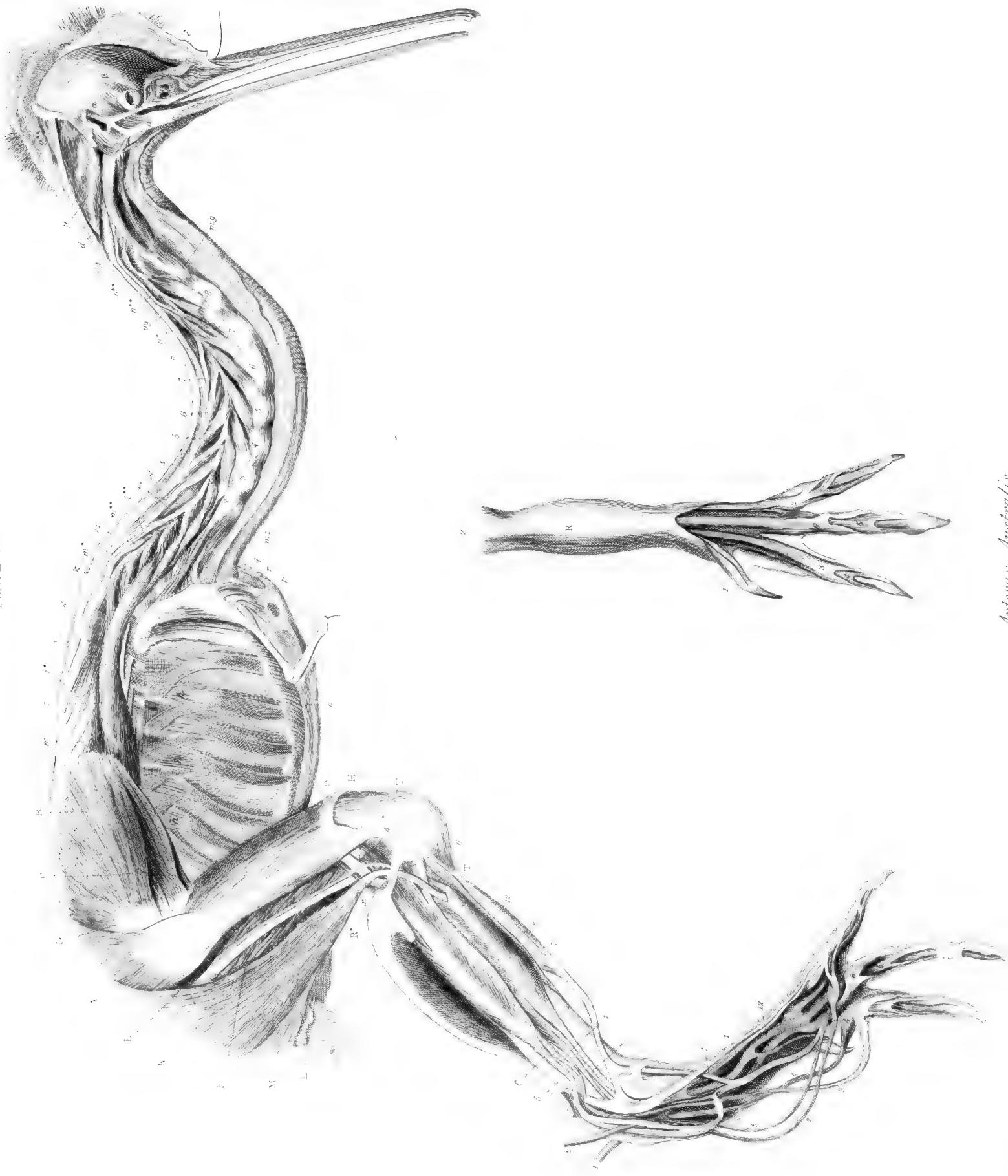
Sphixys austriacus.





Apeltes. fuscatus.
Scale of the natural size.





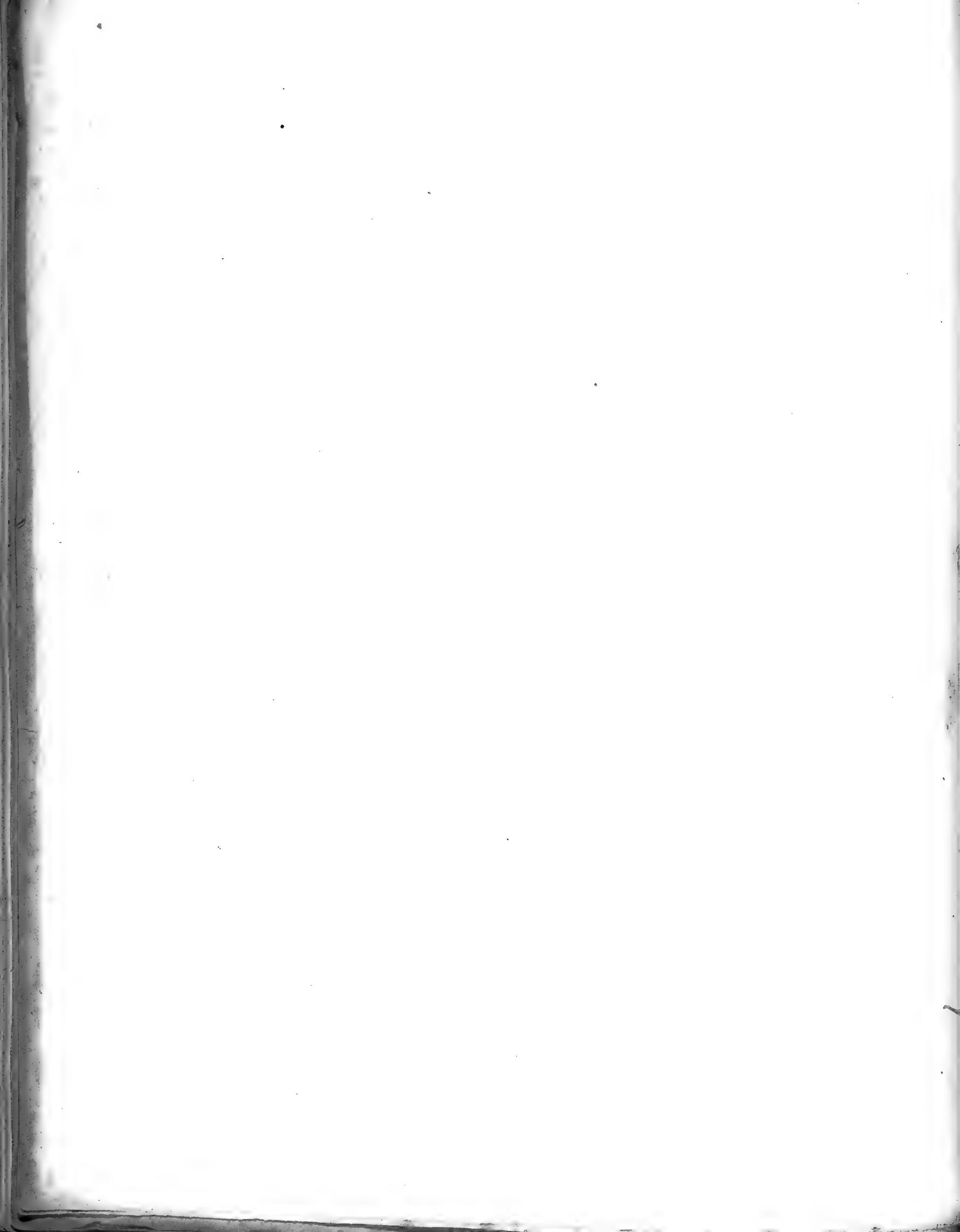
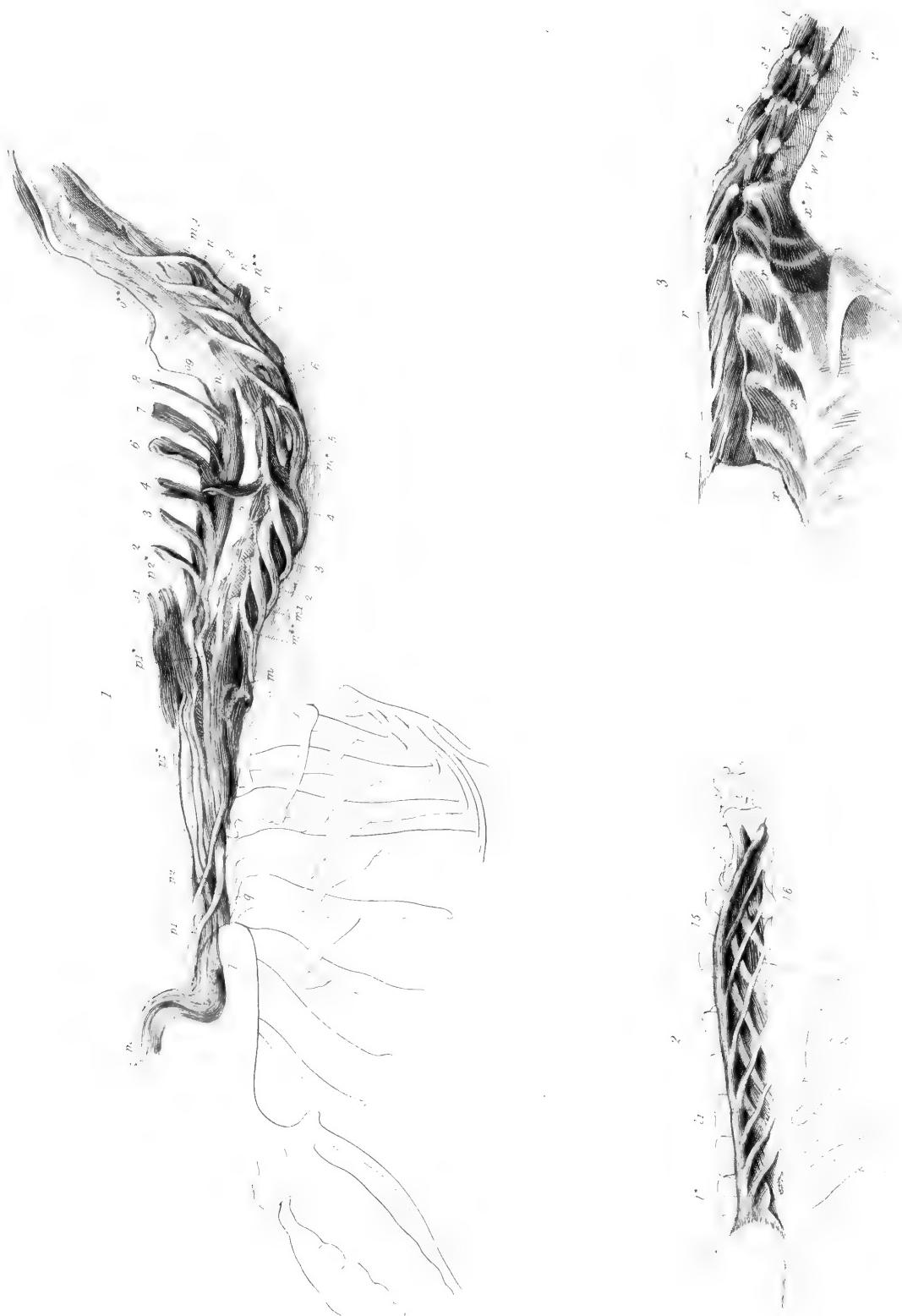


PLATE XII.

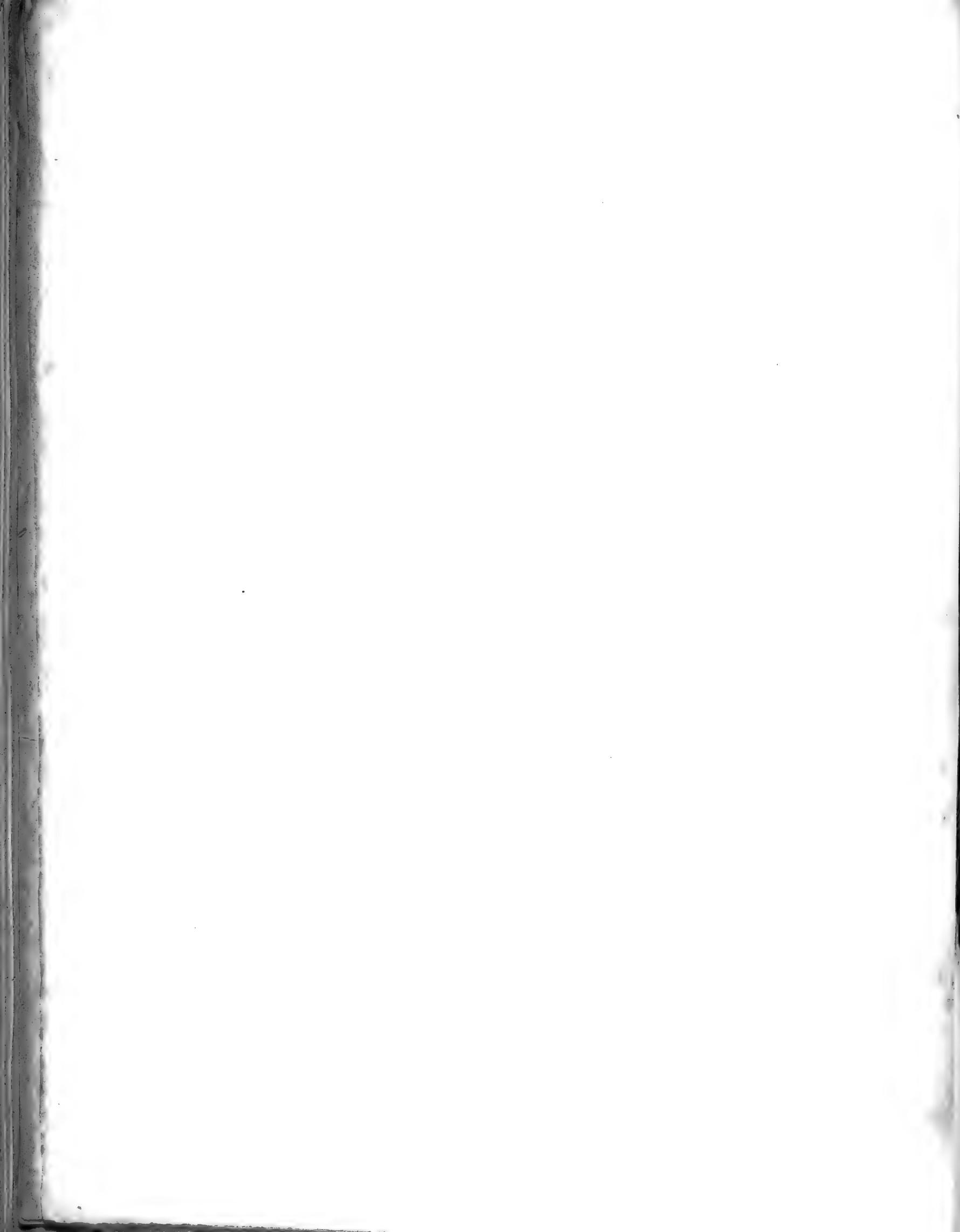


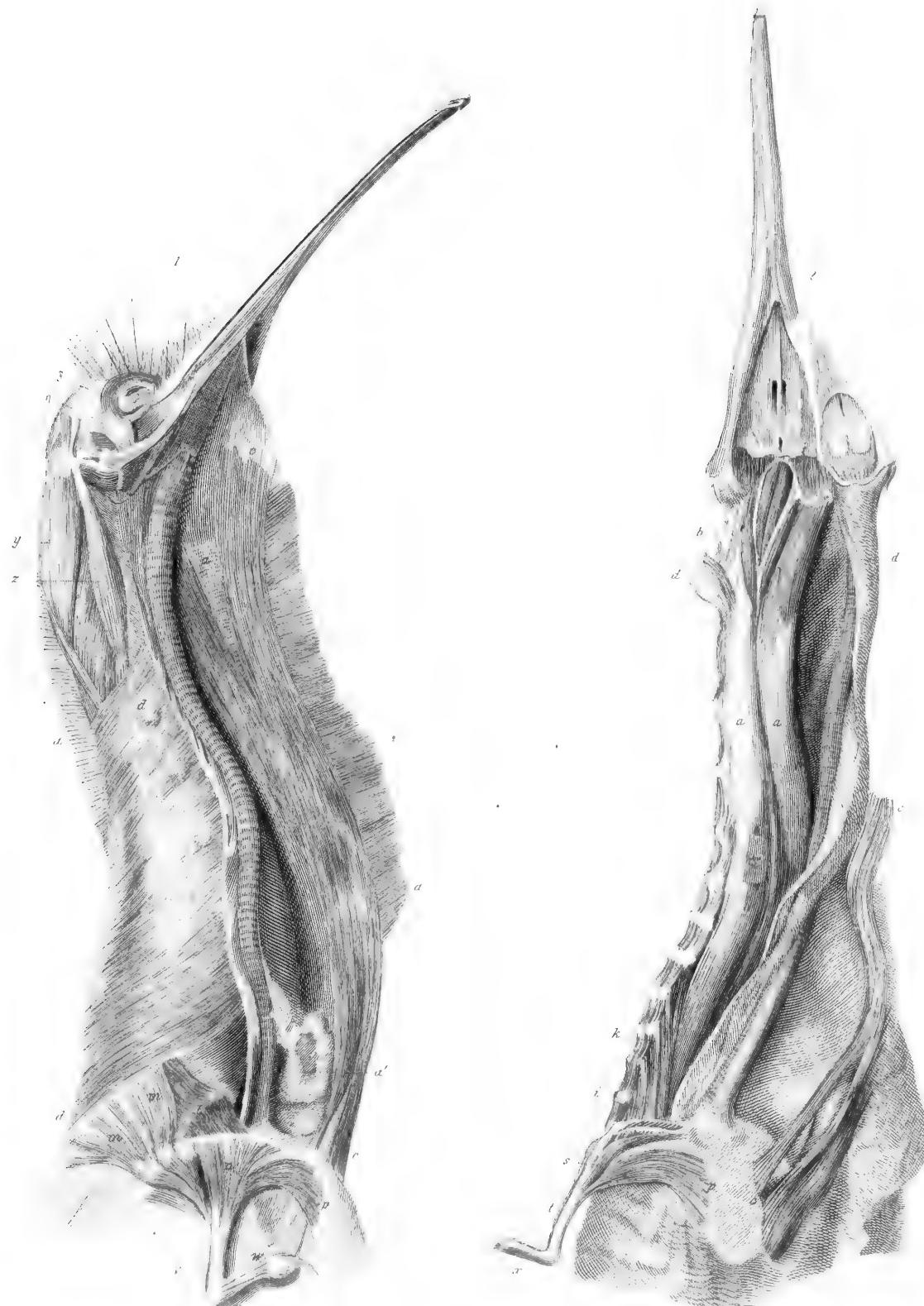
Apteryx Australis.

Scale of the natural size.

J. Flaminio 57

R O & W Schoof del.





Apteryx Australis.

Scale $\frac{1}{2}$ the natural size

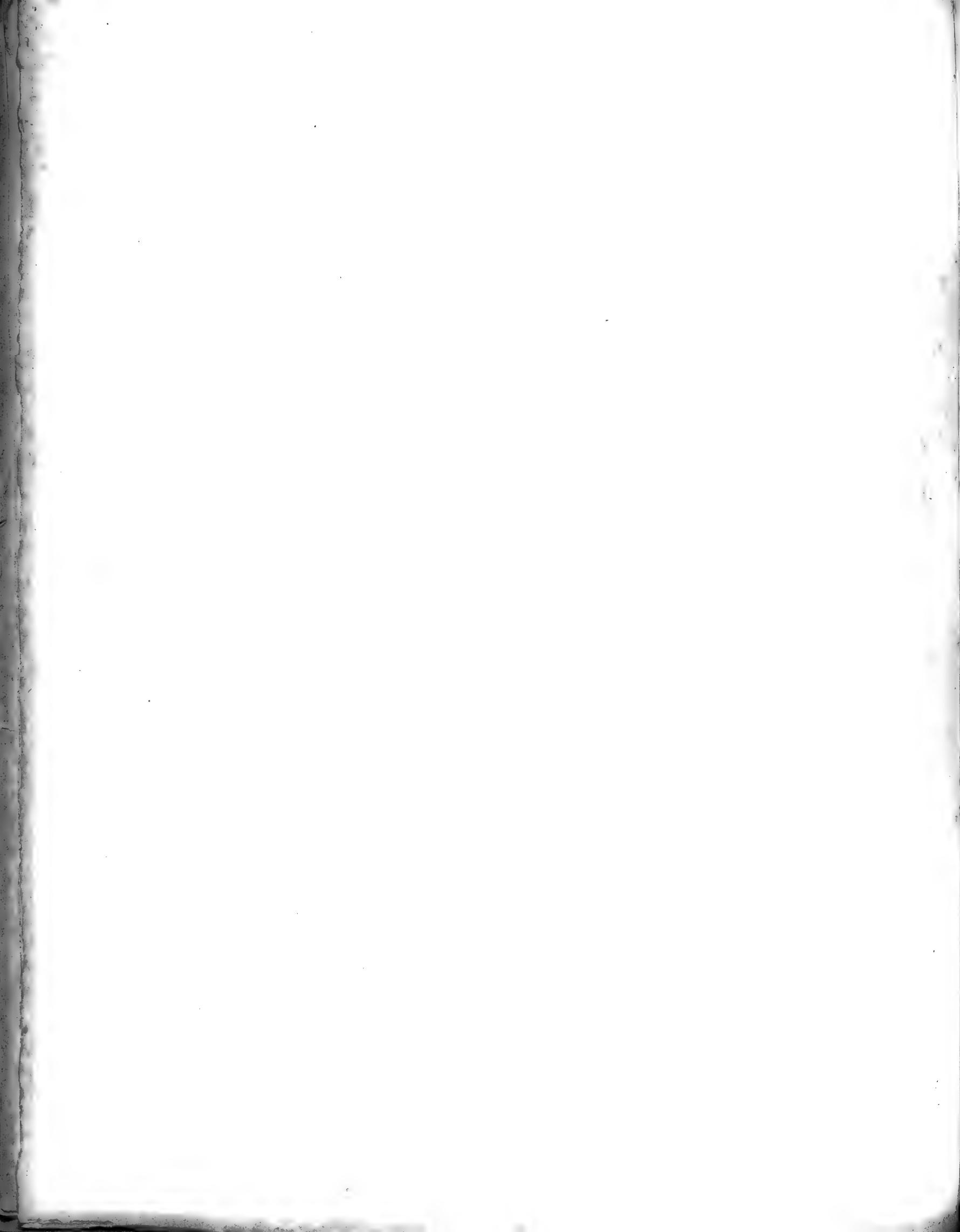
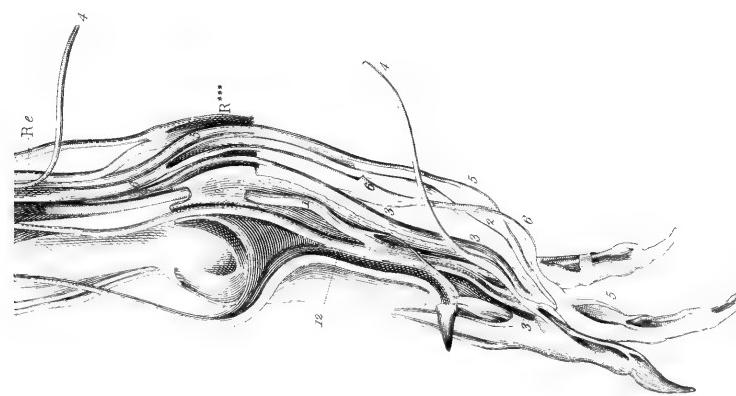


PLATE XIV.

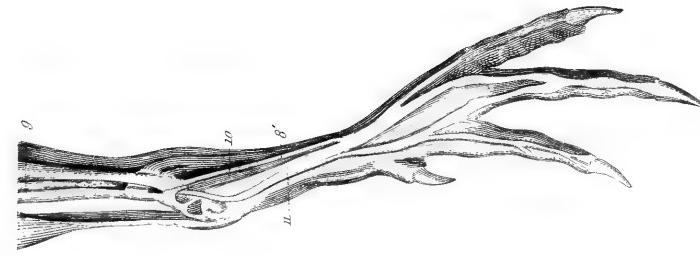


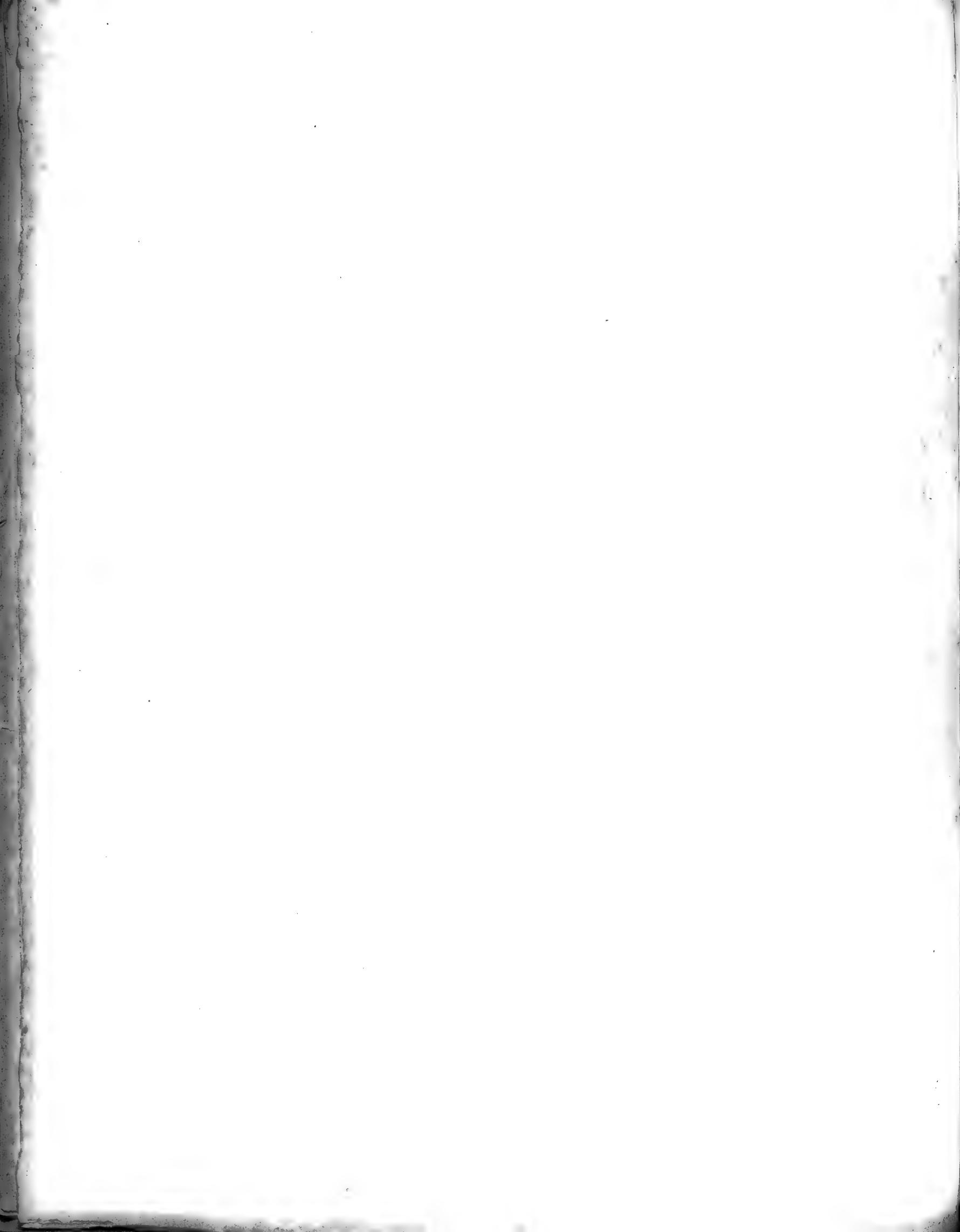
R. O. & W. Sharpe del.

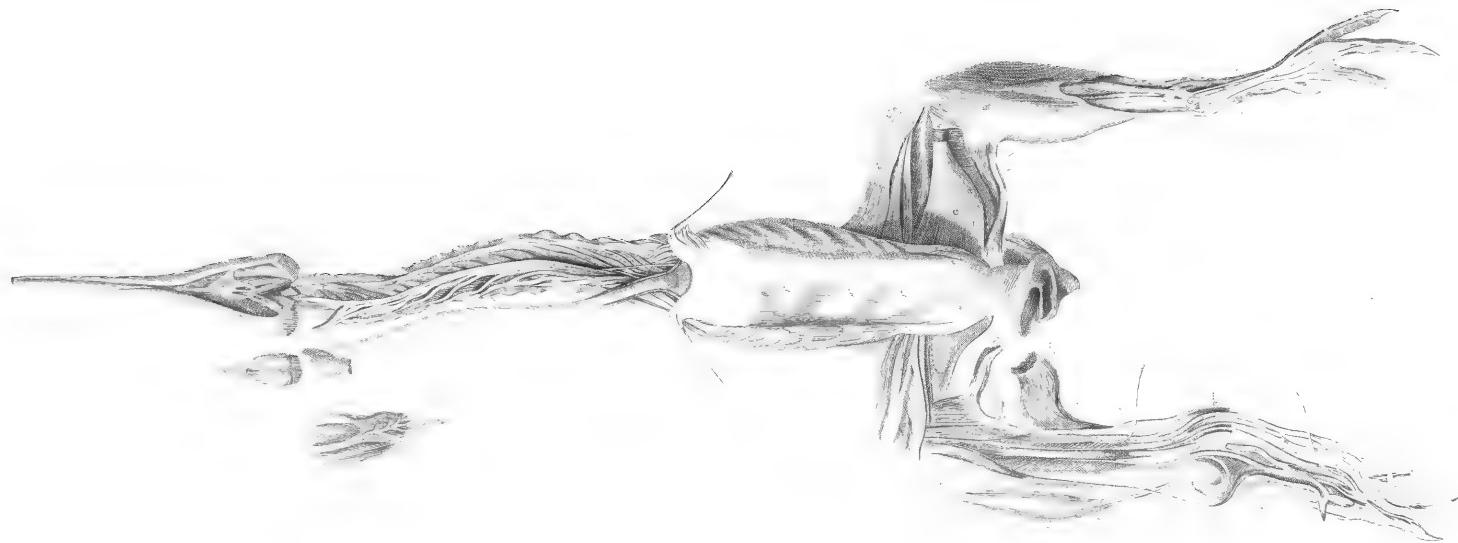
Apteryx Australis.

Scale $\frac{1}{4}$ the natural size.

J. Barratt, sc.

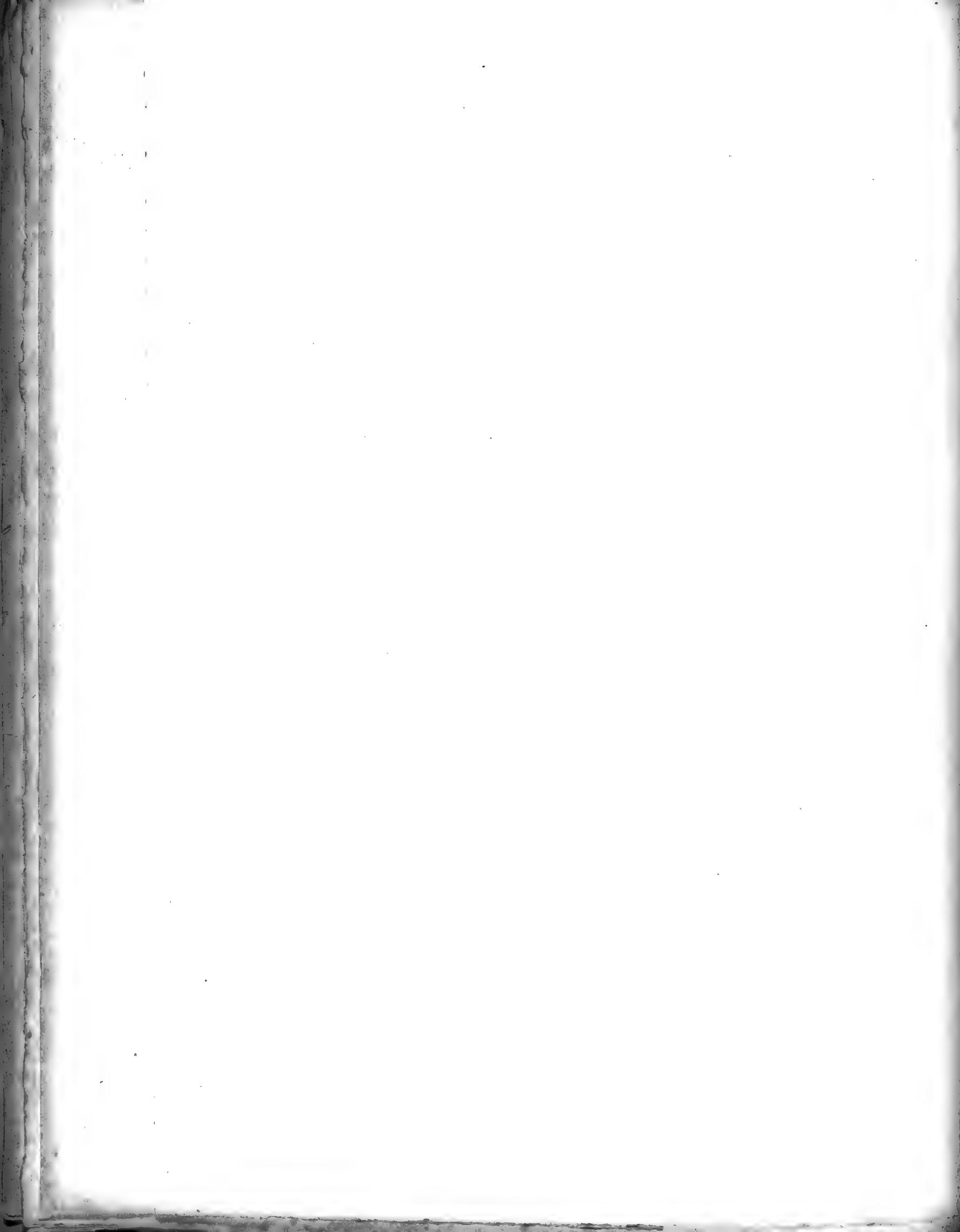




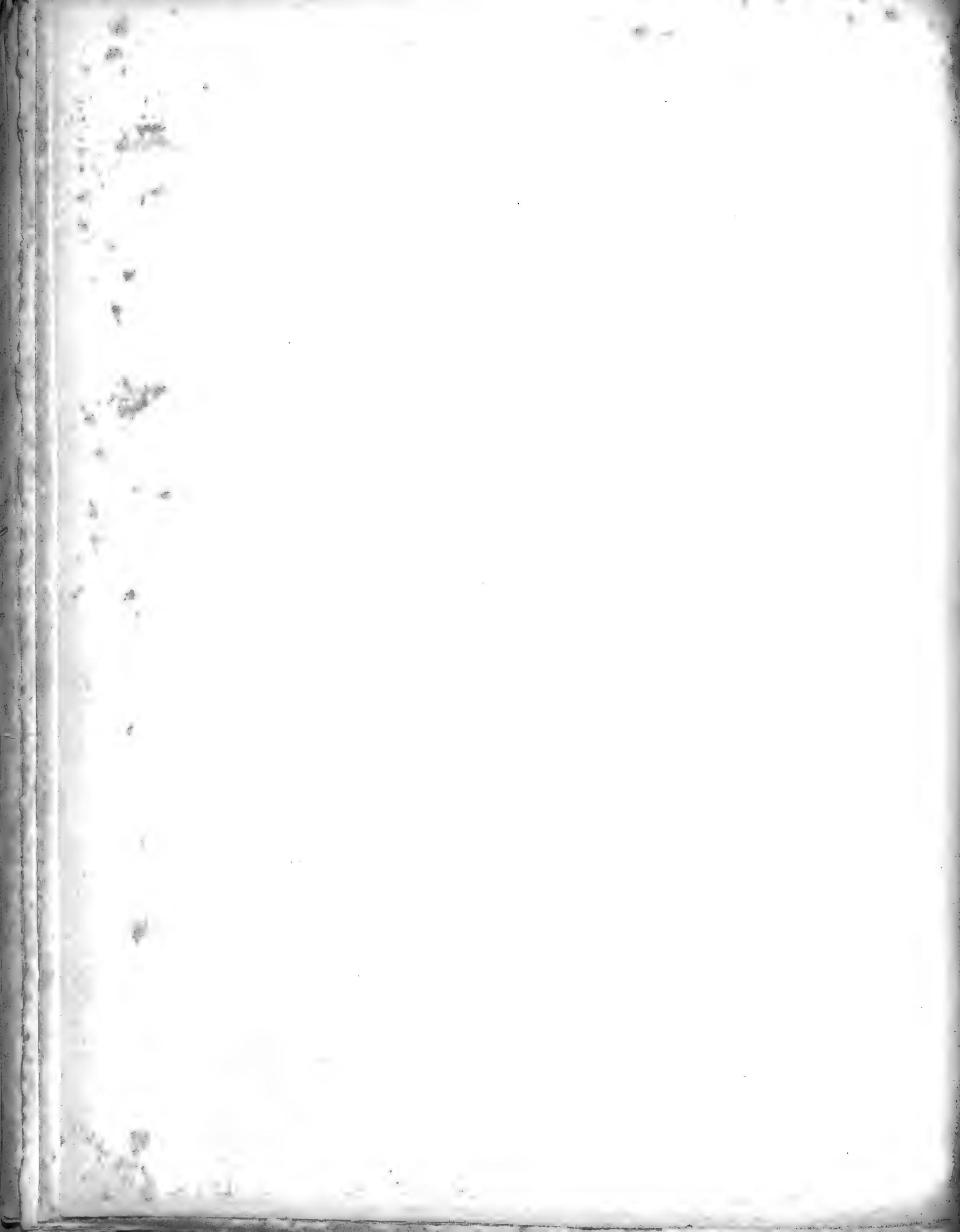


Hatching - *Leuciscus*

After *the Fishes of Central Europe*.





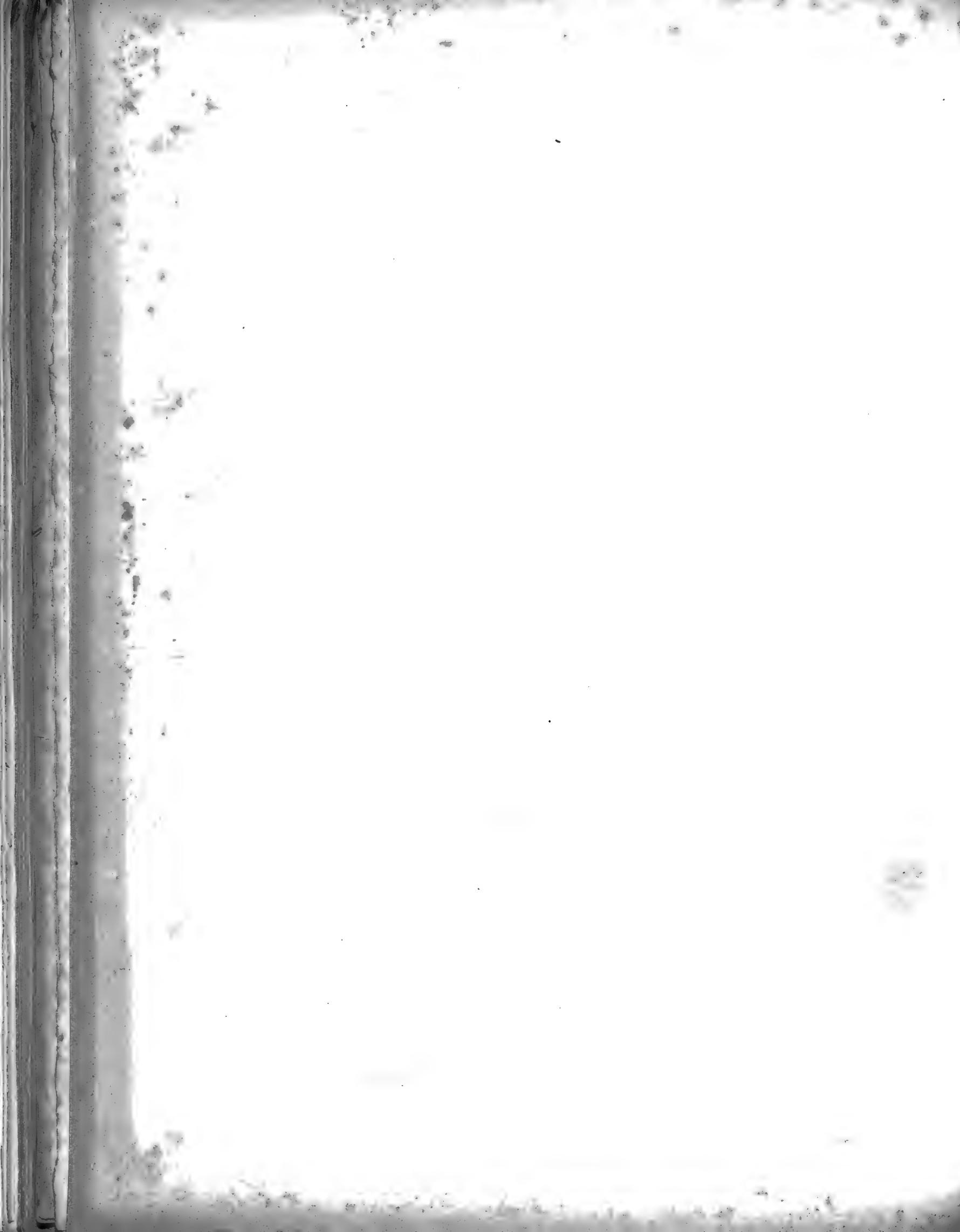




Drawn from cast on Zinc

Day & Hodge Lith^r to the Queen.

1. 4 *Dromornis struthiooides*. 5 *Didus ineptus*.



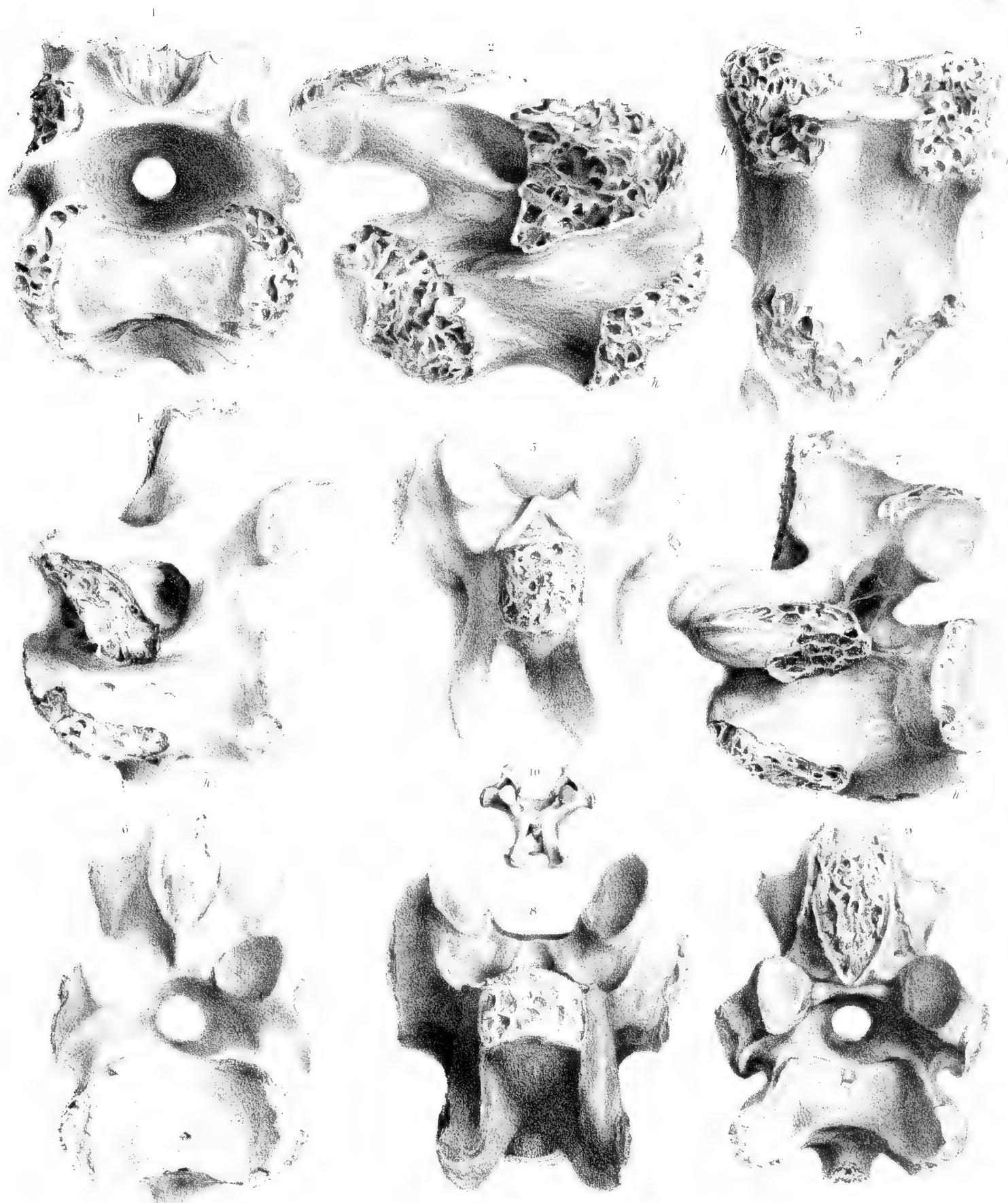


PLATE XVIII.

J. G. DUMERIL. M. D. CCCC.

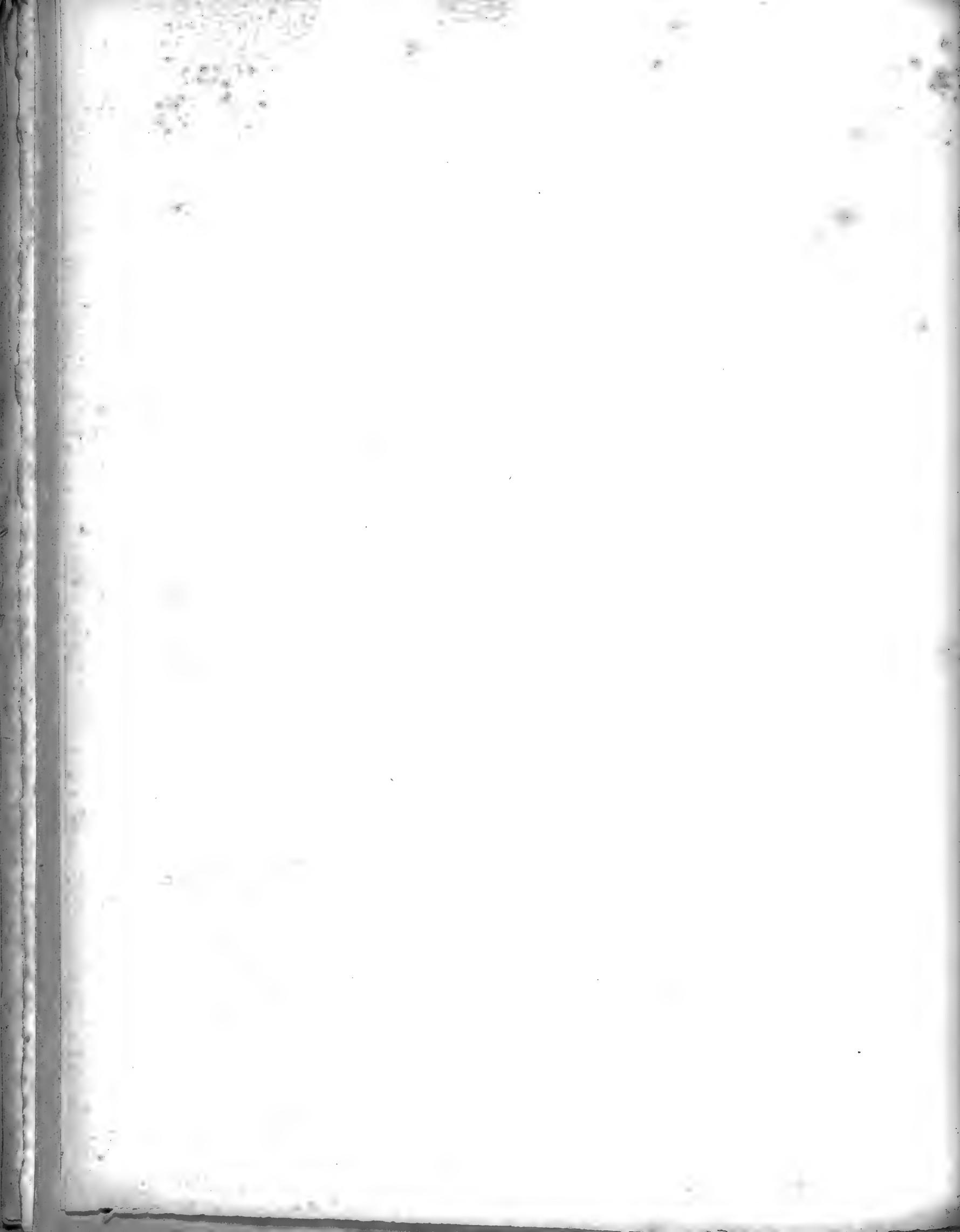


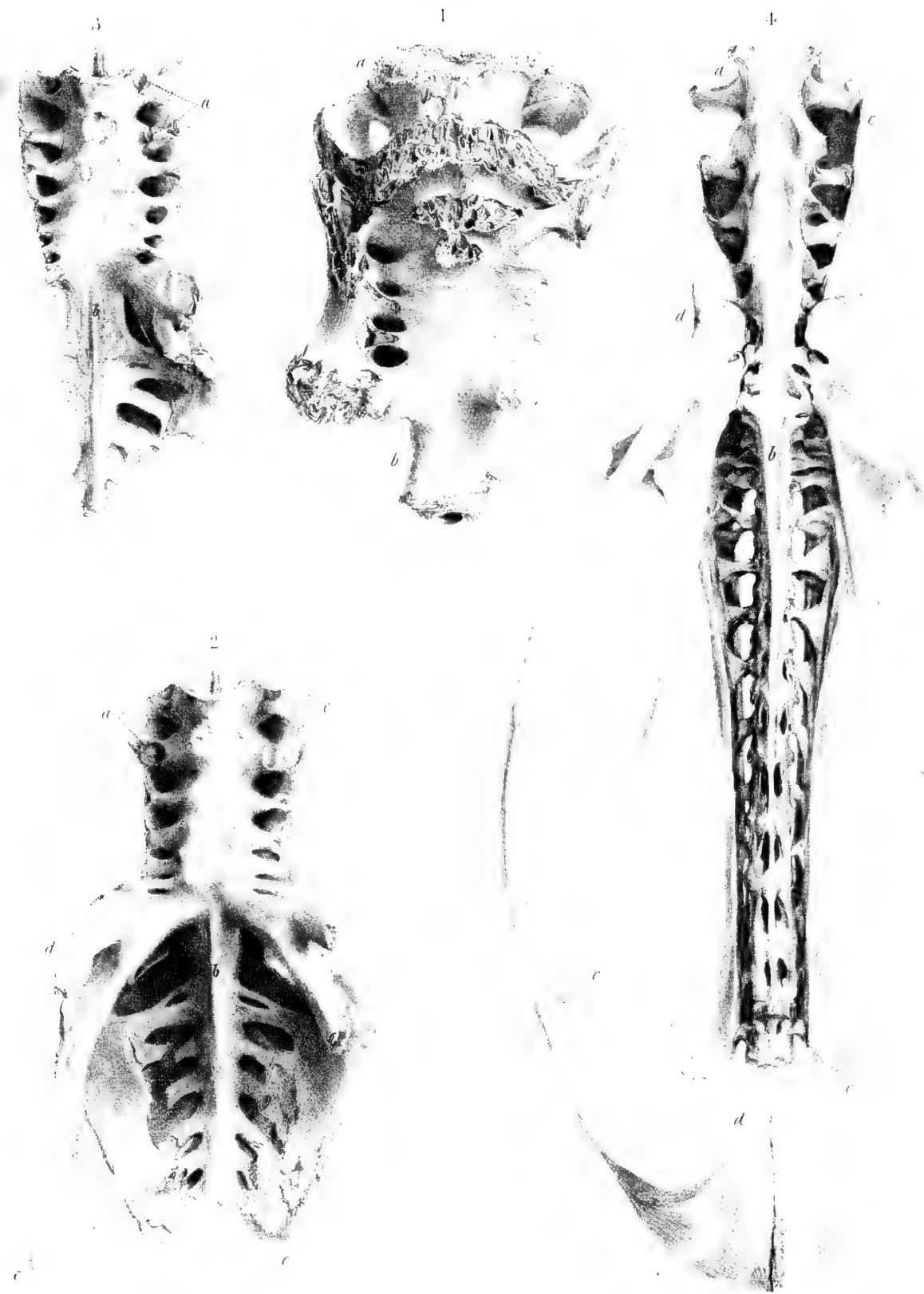


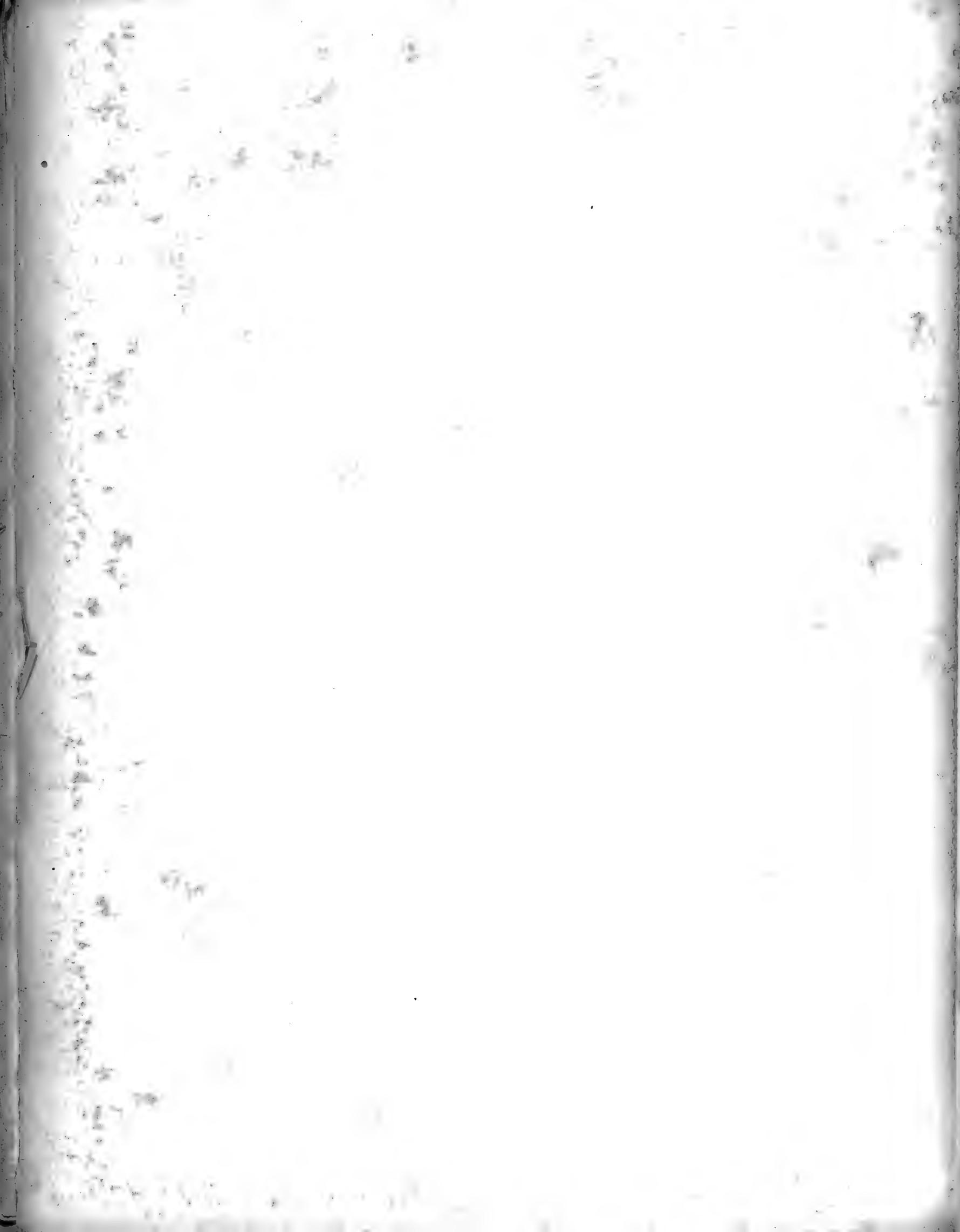
Pl. XIX

J. P. de la Roche

136. *Conularia* *Plumosa*













Tibiae.

Dentines indistinctes



$P_{\mathcal{D}_n} \mathbb{M}_{\mathcal{A}}^{\mathcal{L}}$



Fig. 1. A lateral view of the skull of *Pterodactylus sinensis*.

Fig. 1.





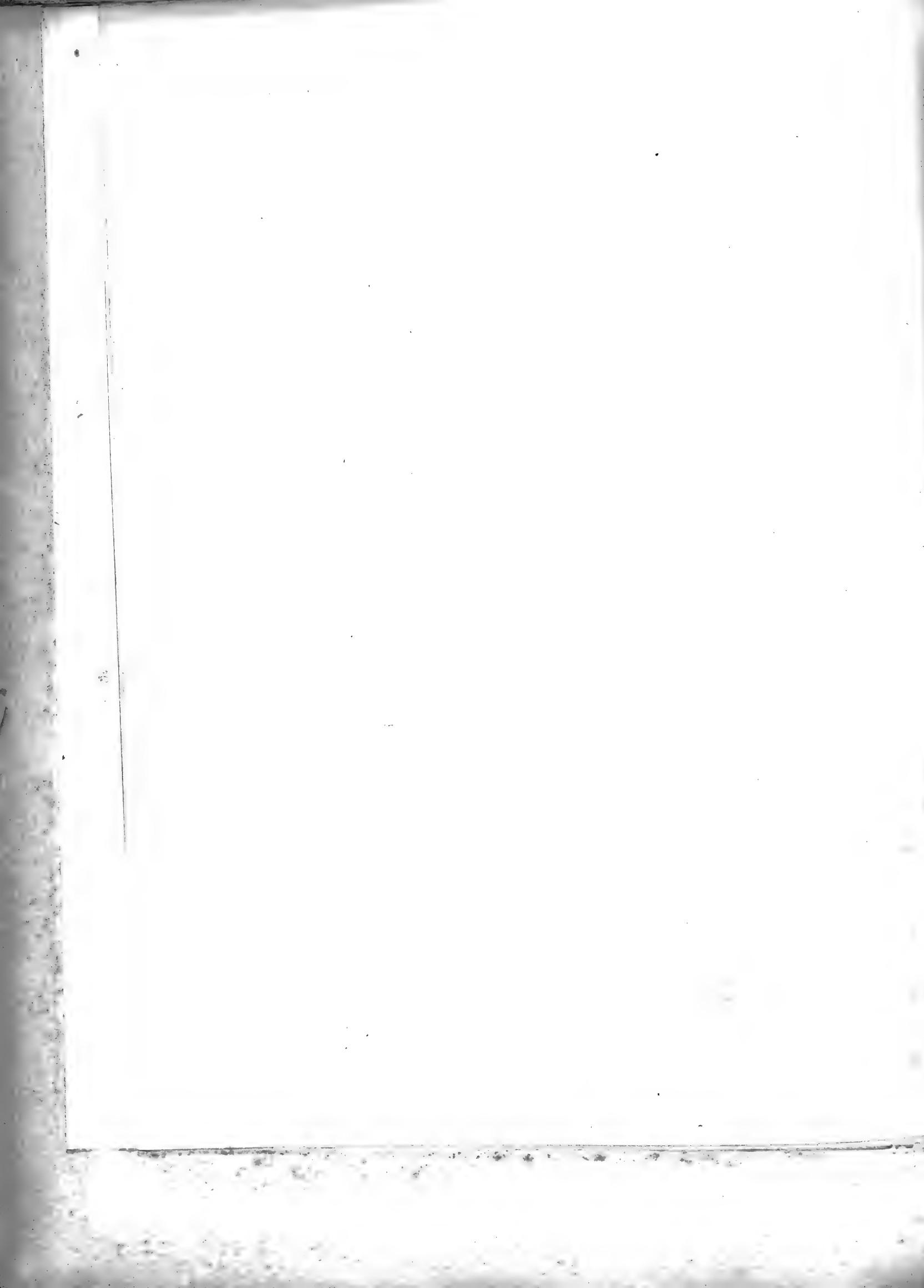
PLATE II.



Lateral view.

Drawn by C. Hullmandel.

Tinornis dromicoides.



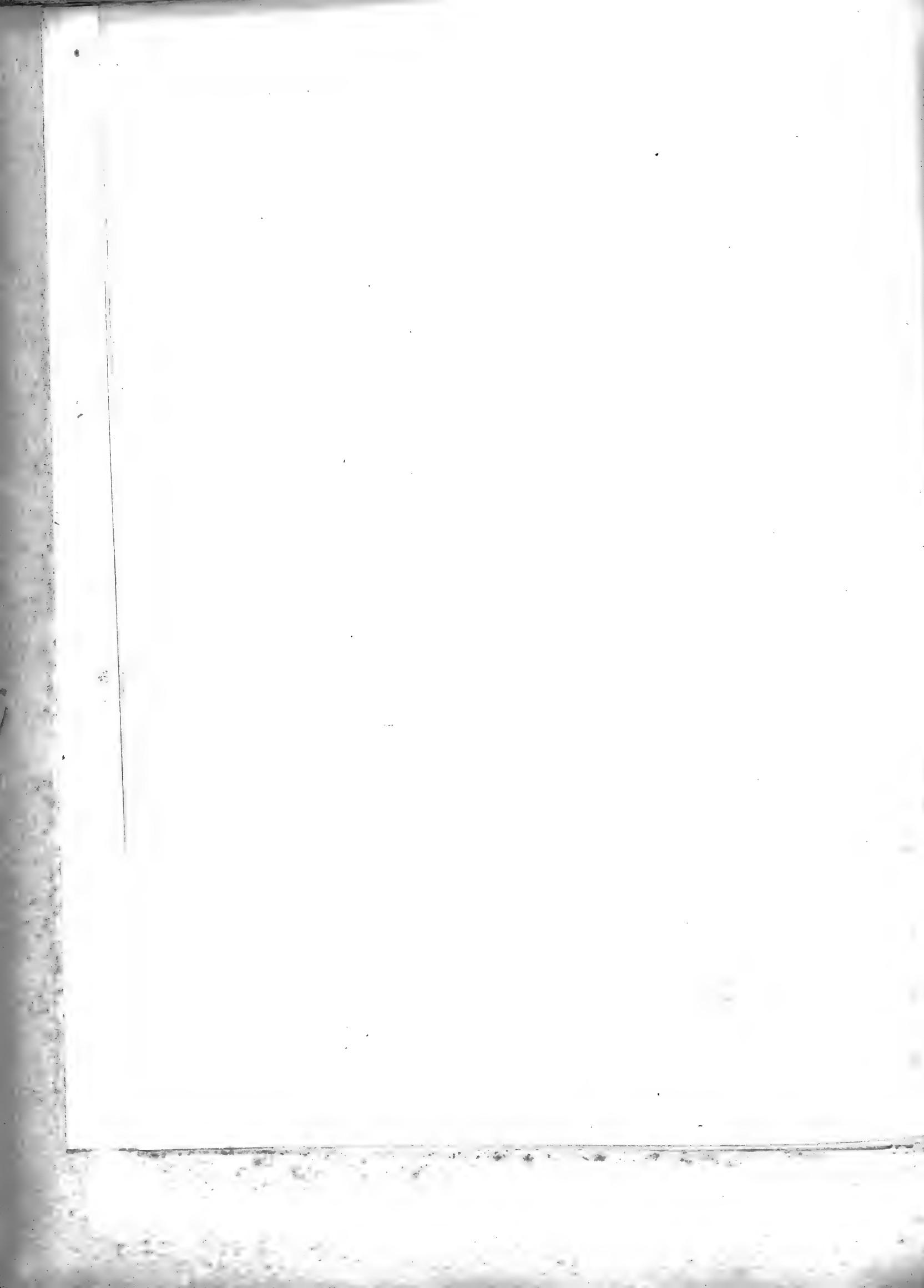


Var. Sicc.



Var. Sicc.

1 *Dinornis struthoides*, juv. 2 *Din. dromiceoides*.

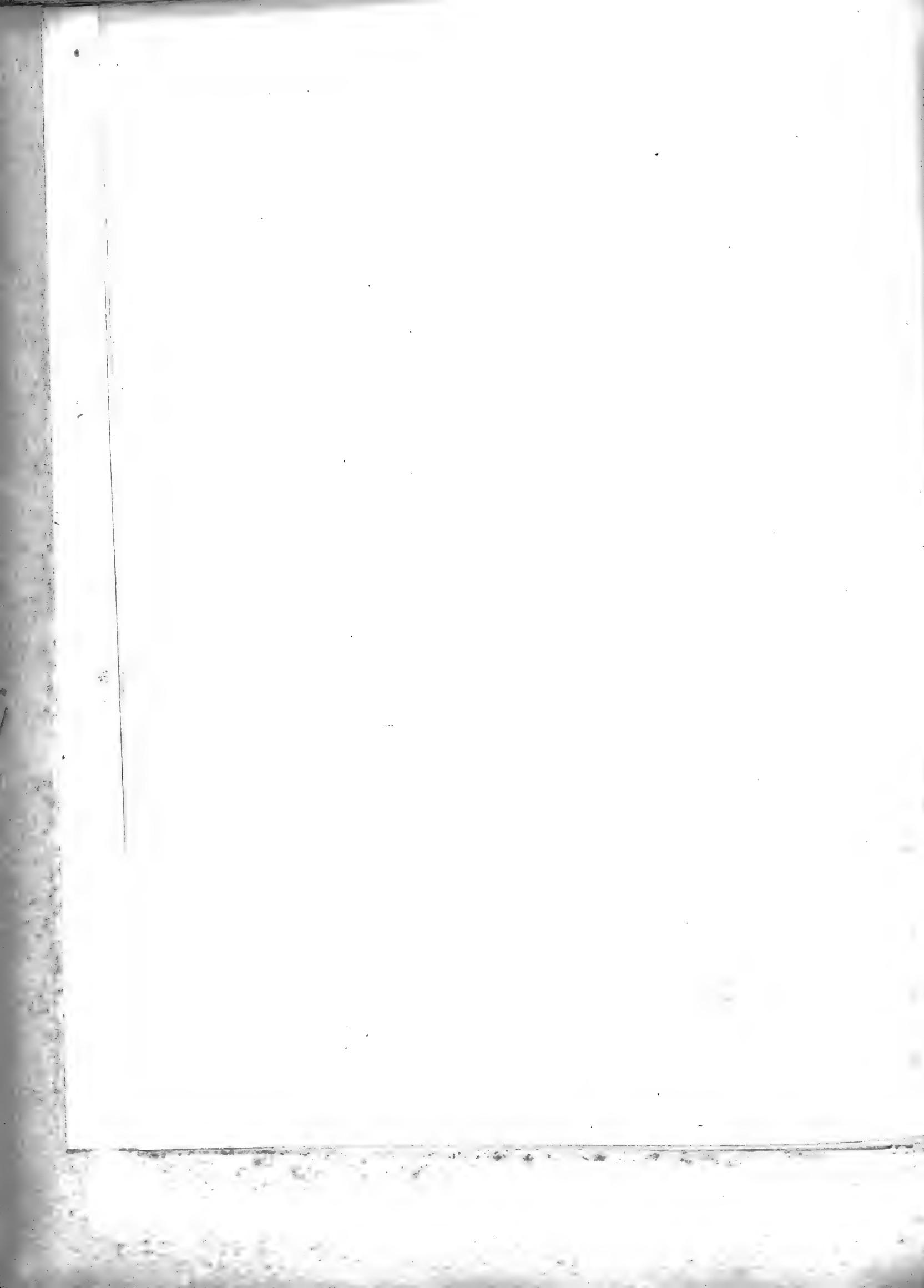


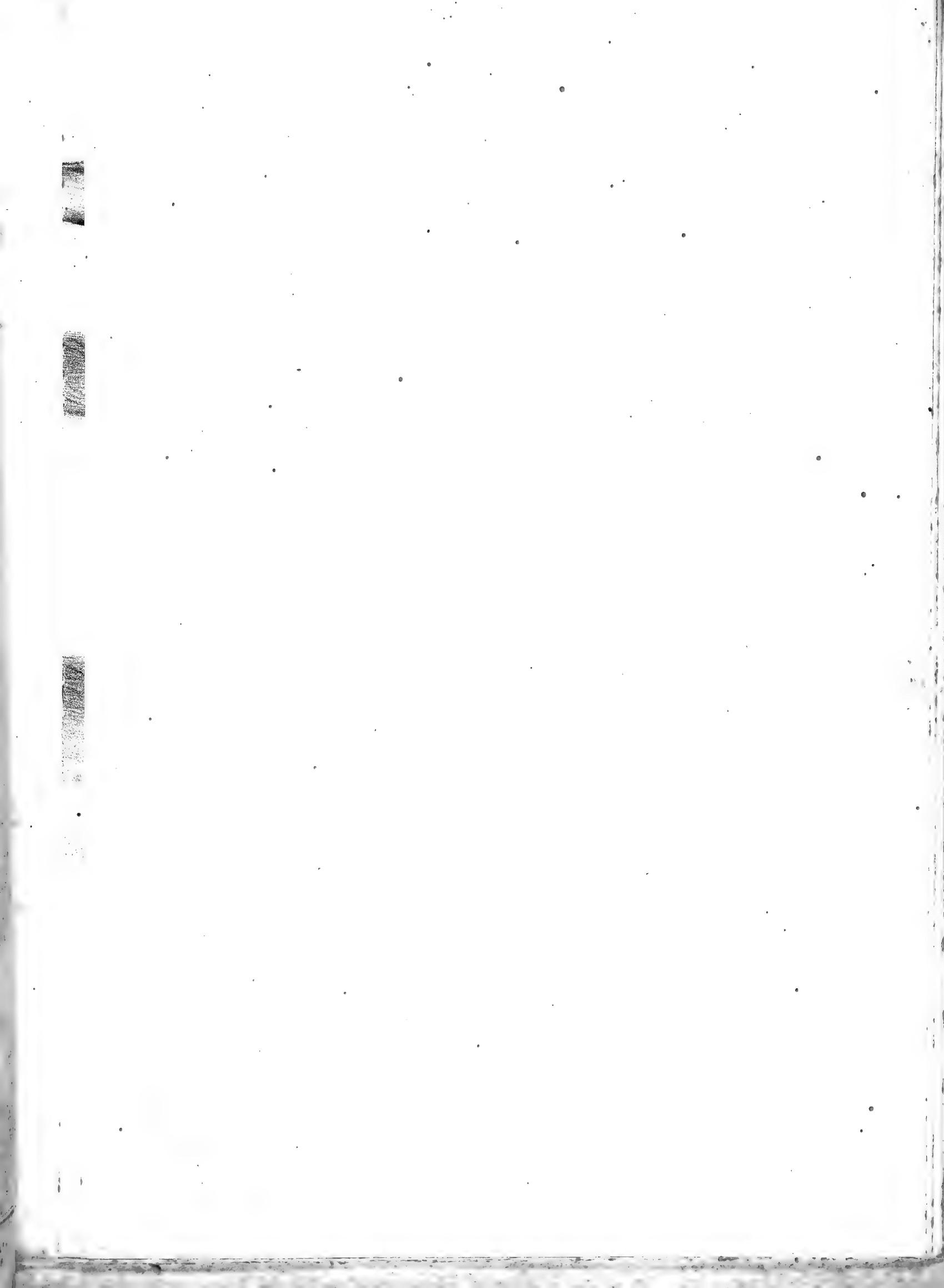


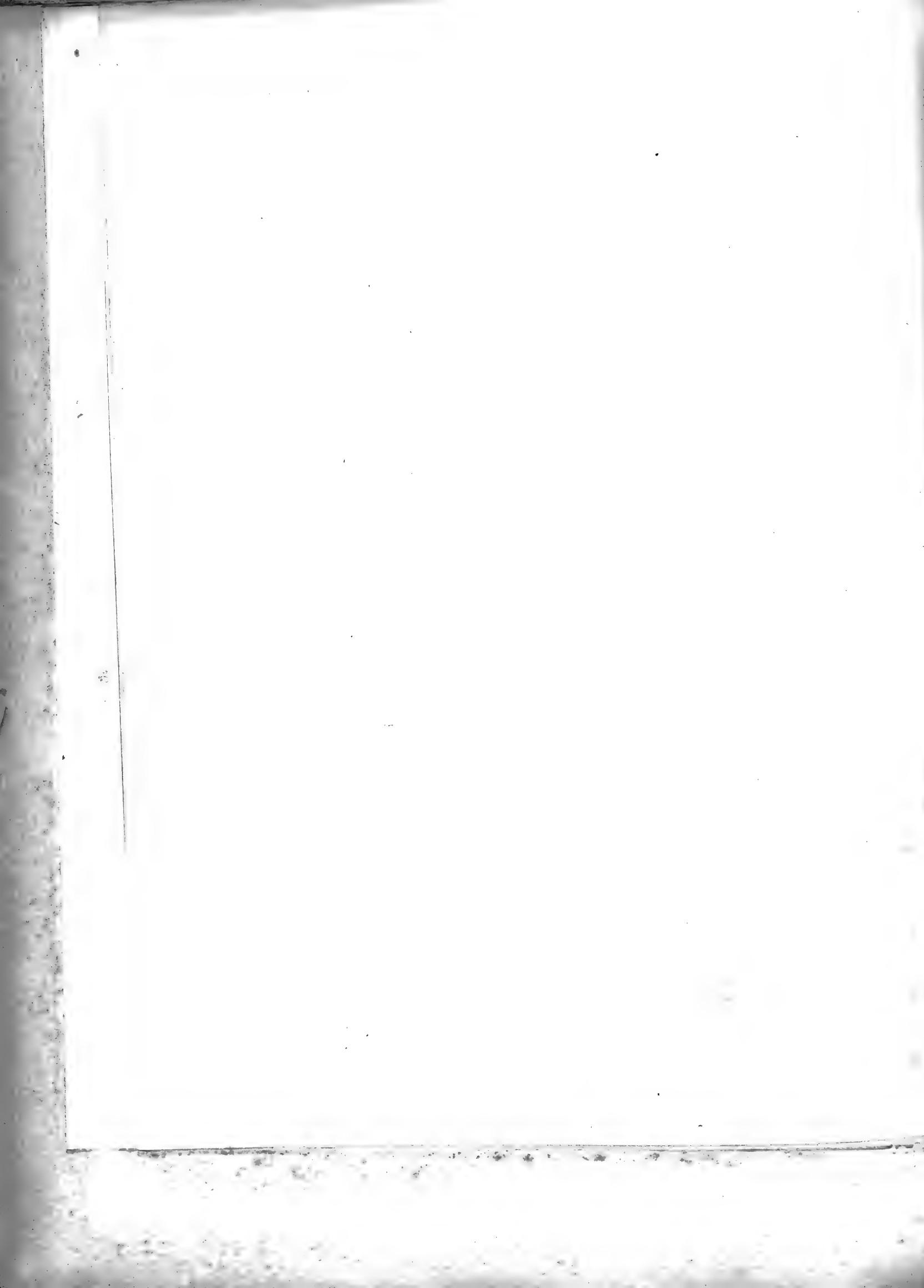
Engr'd from Drawings by J. D. M.

Printed by C. T. Staniland

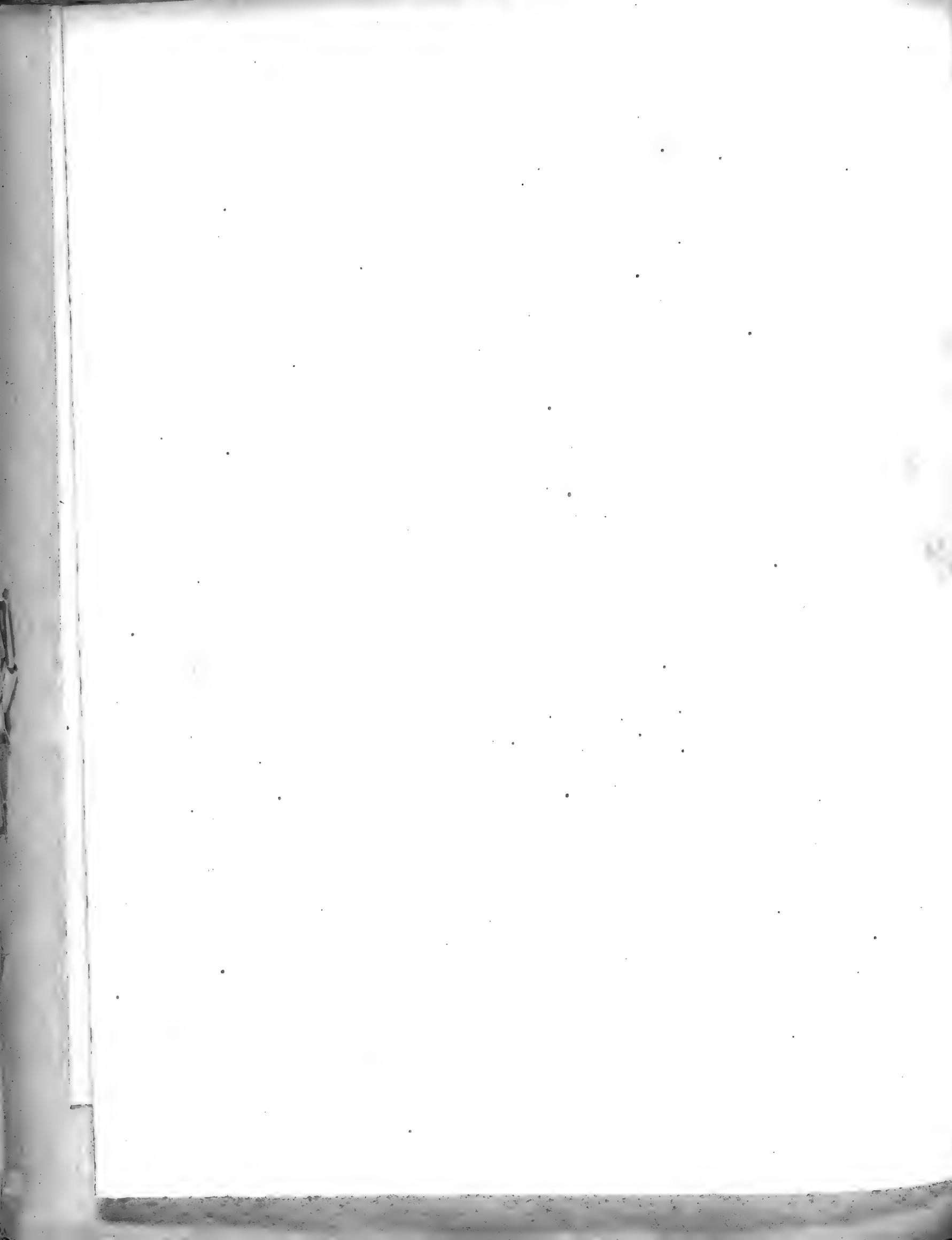
Dinornis didiformis.

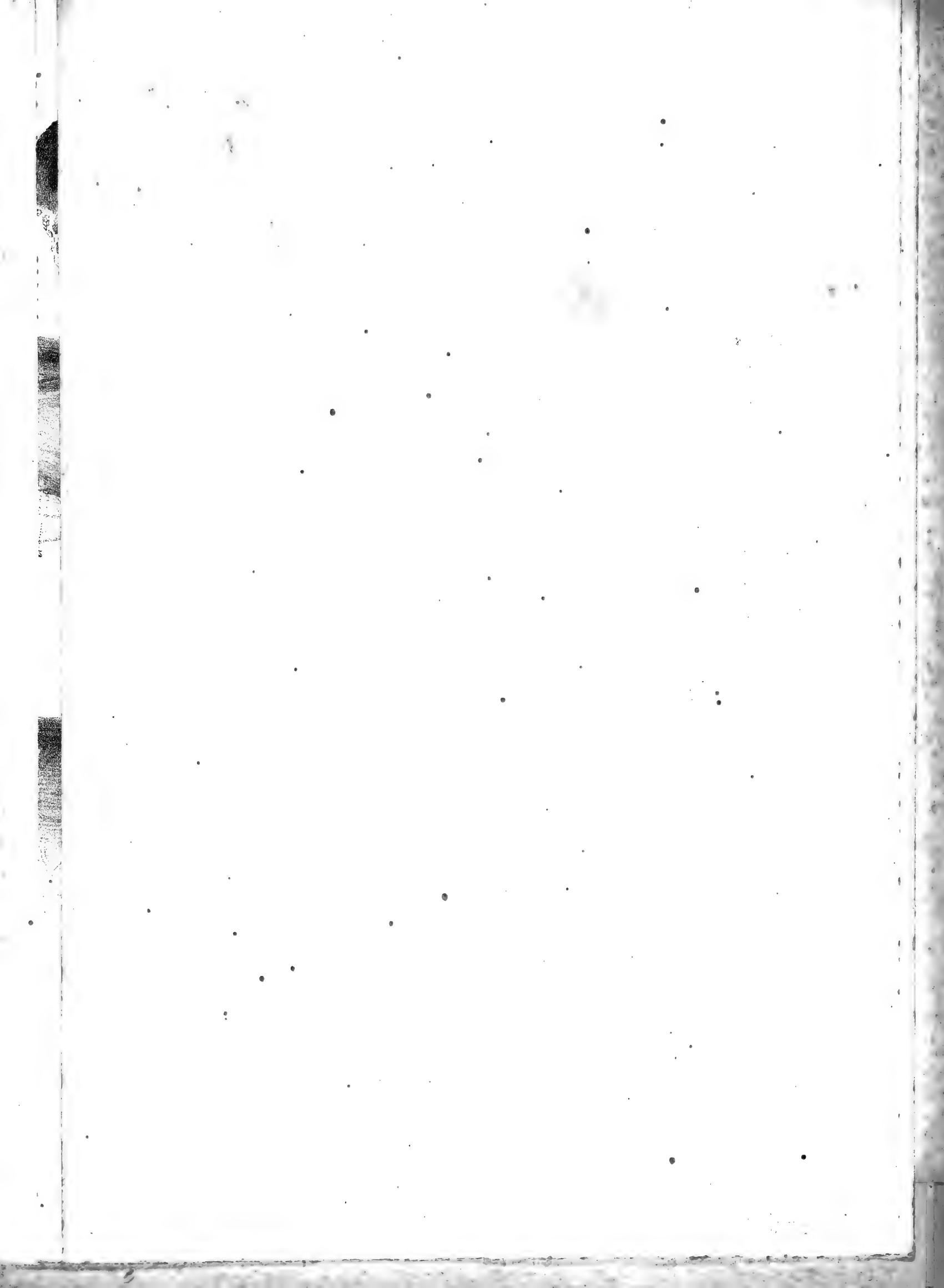


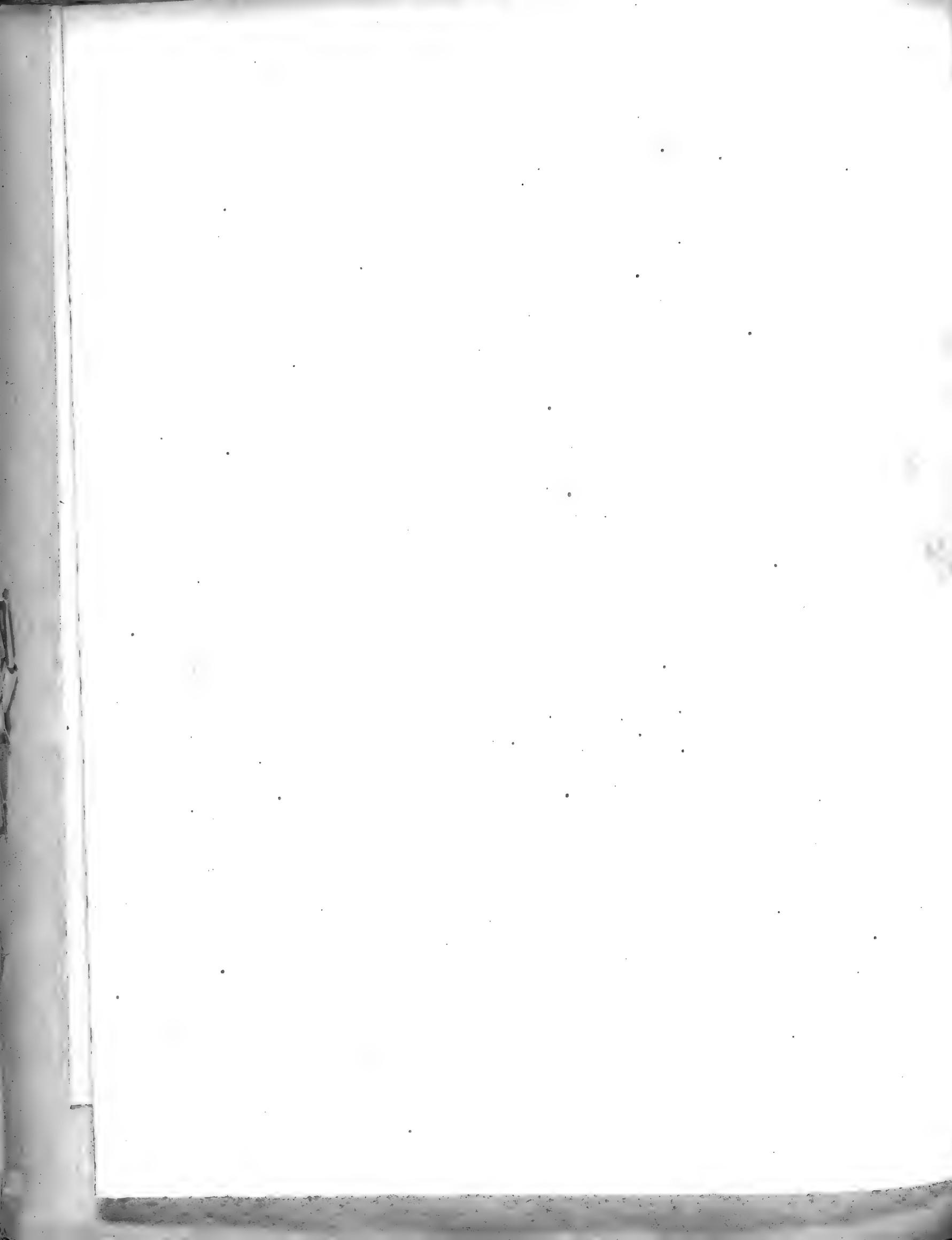




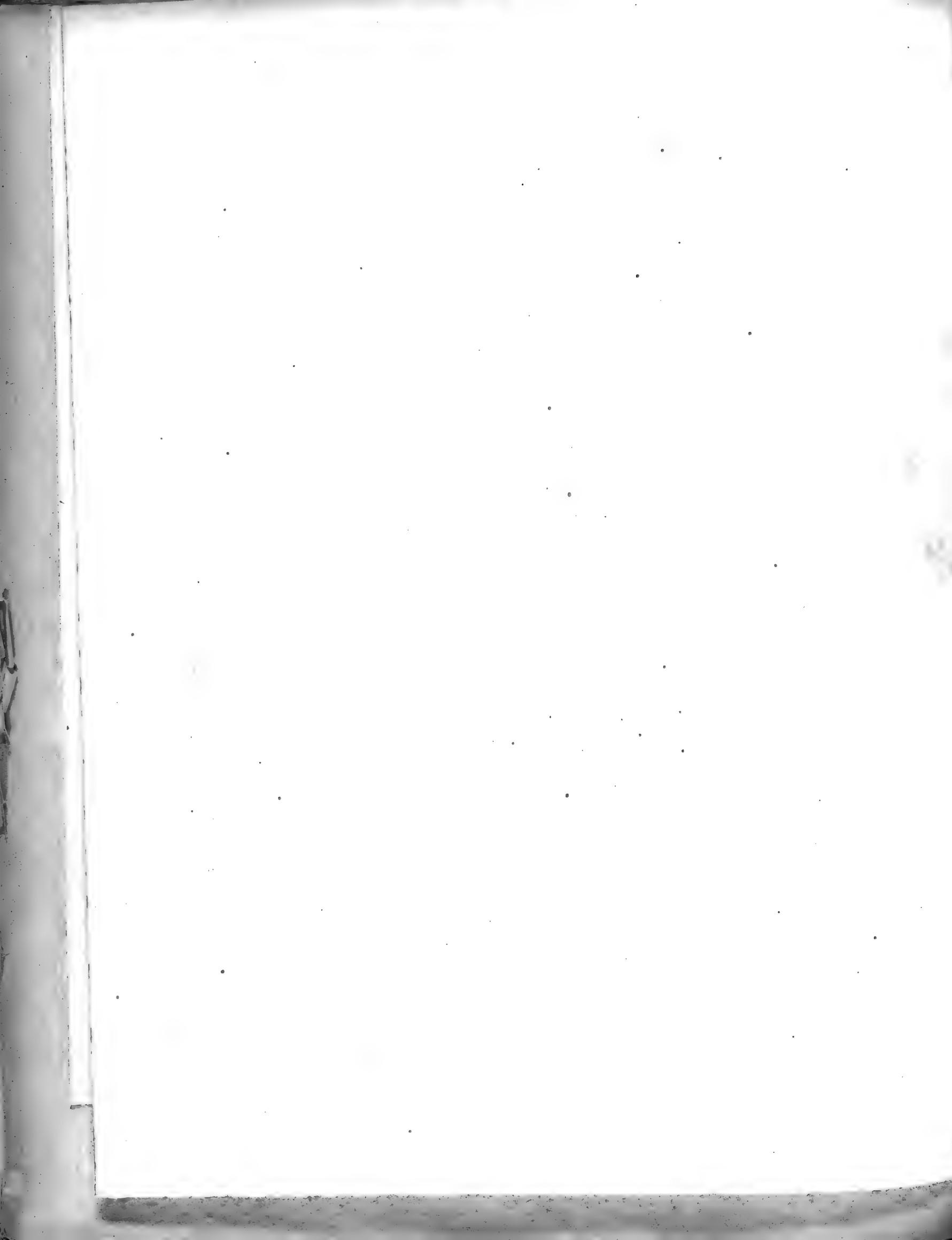








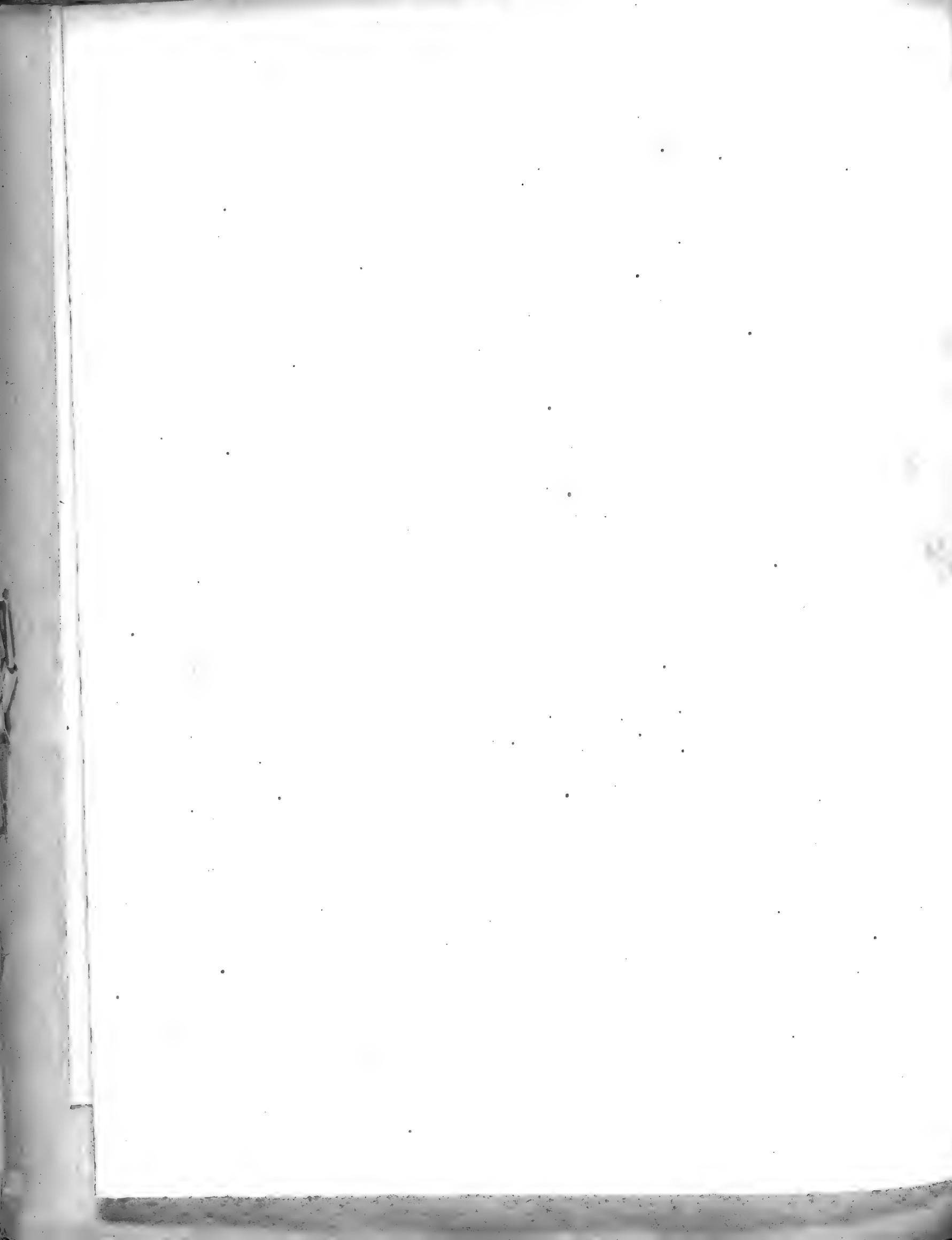




Minerals. I. Magnetite, & Stalactites of the Bahamas.

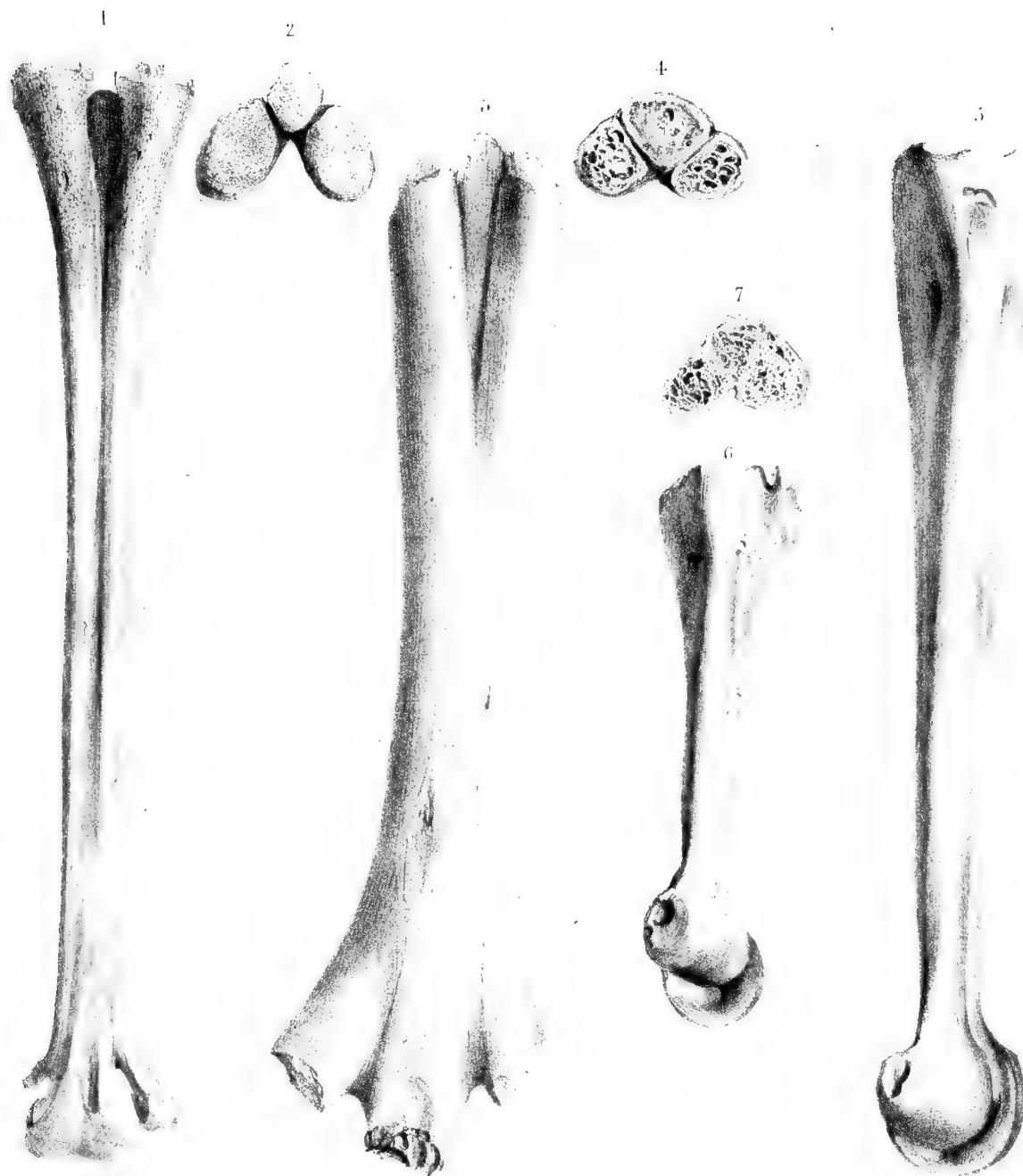
Fig. 2.



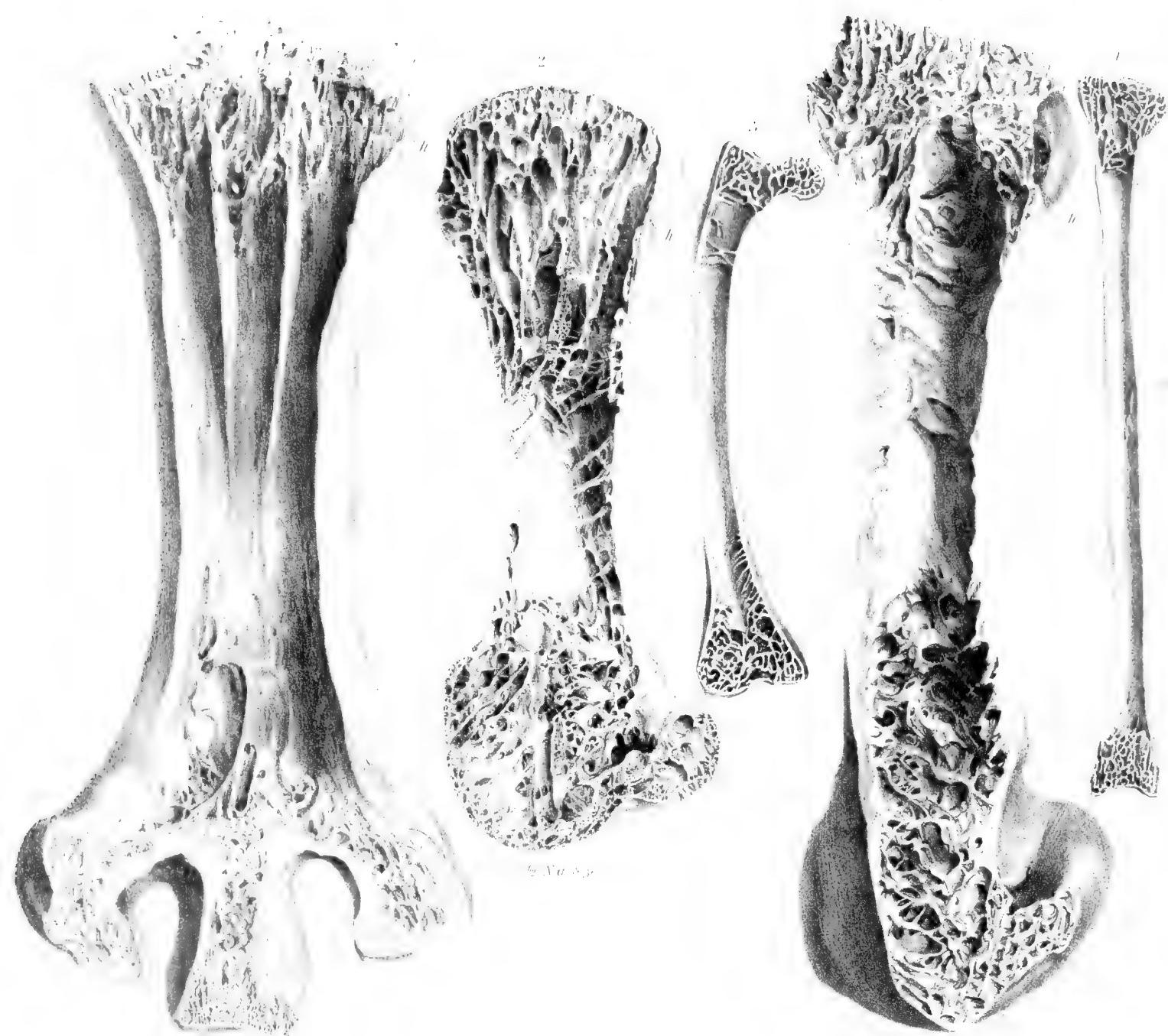




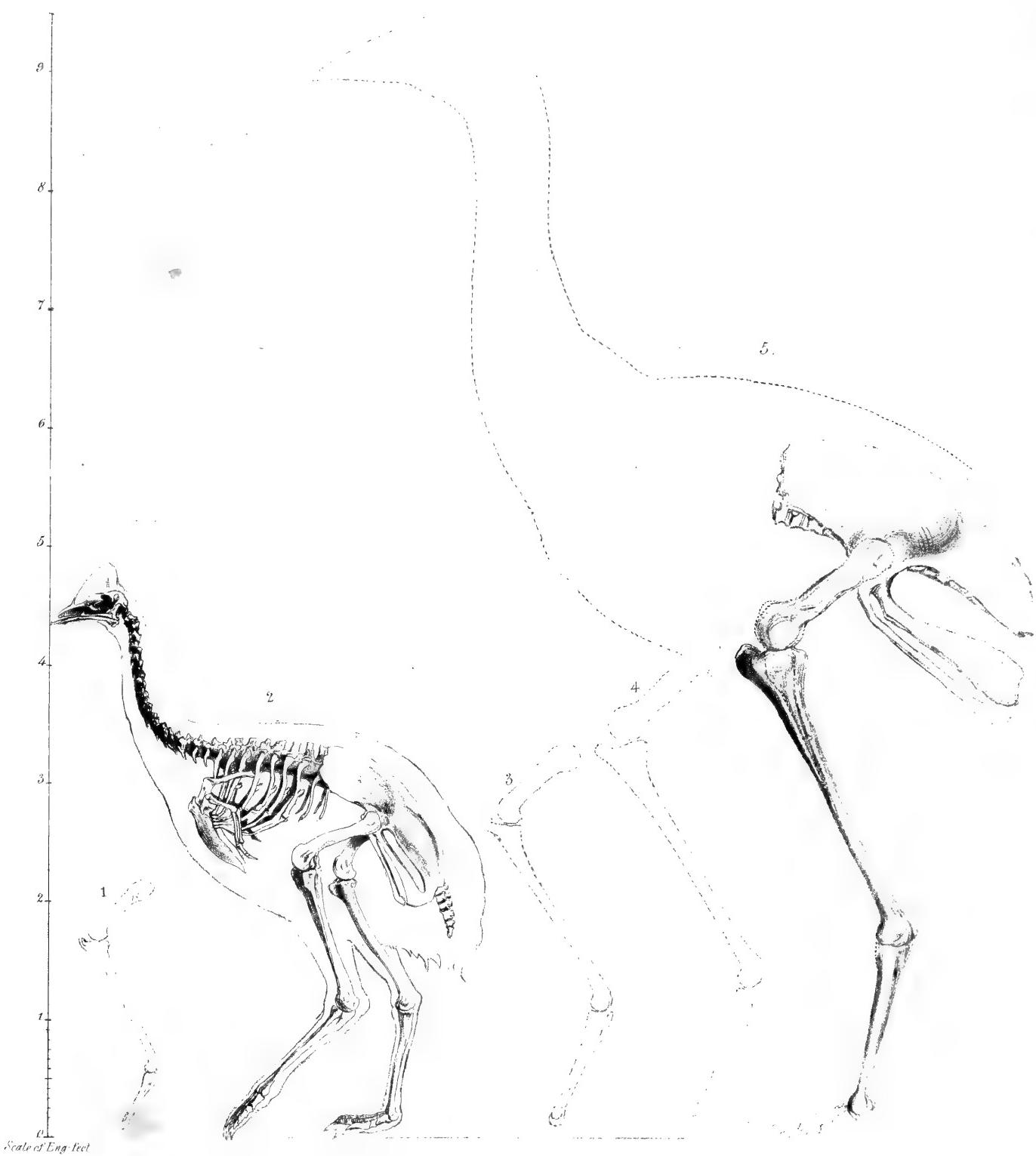












Dromornis didiformis. 3. struthoides. A. giganteus.
2. P. minor. 4. rufa.

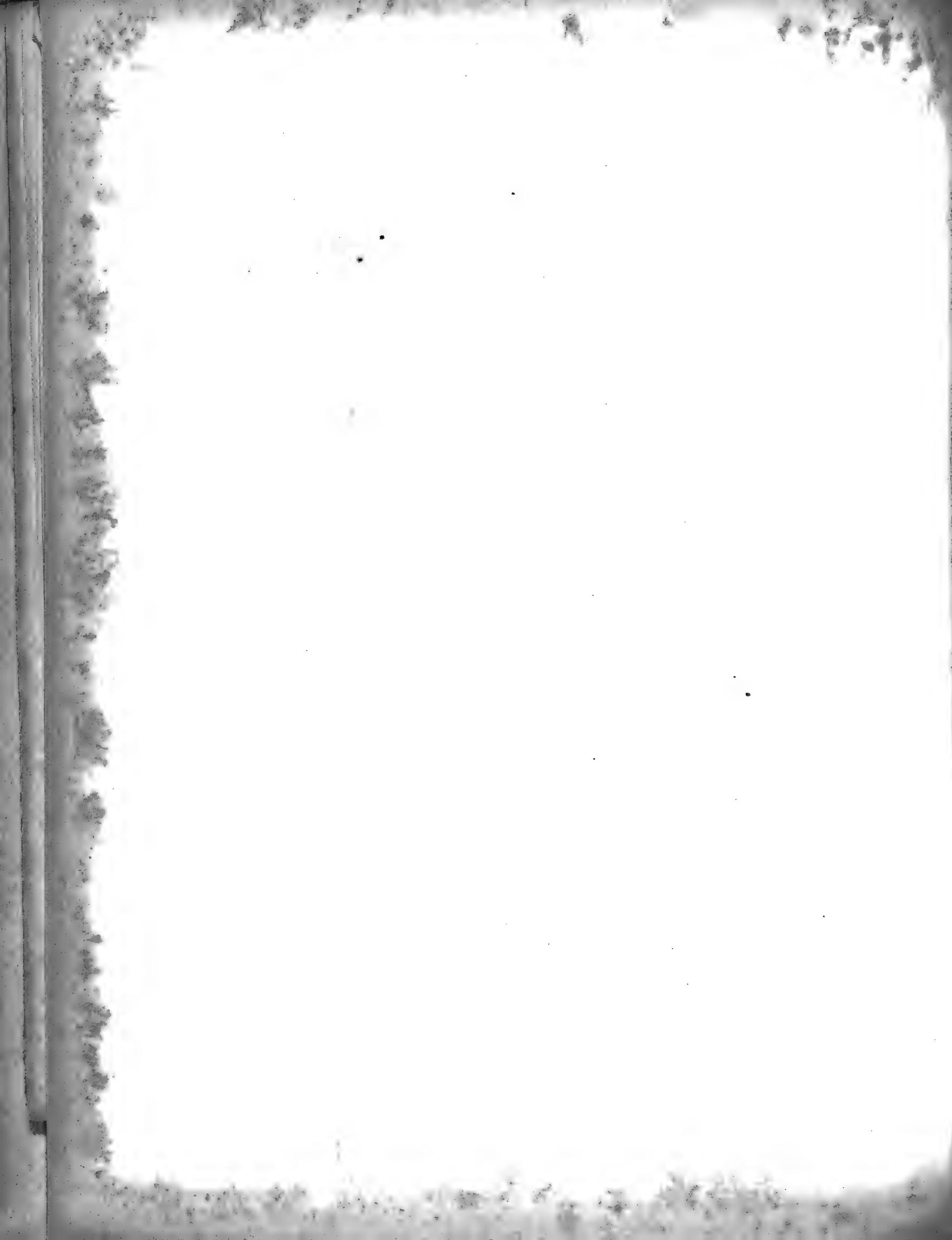


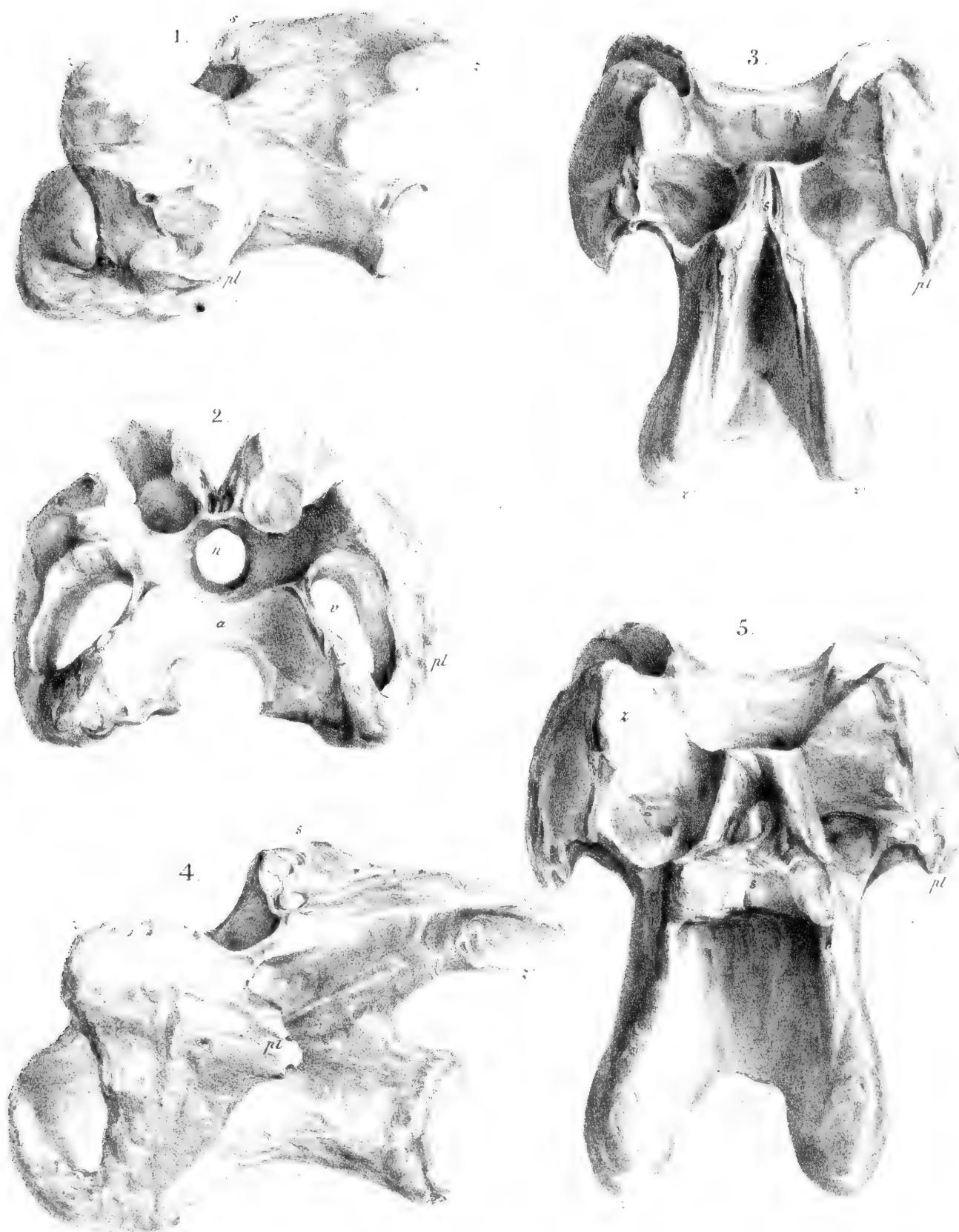


Dromaius, etc.

Dromaius, etc.

1, 2, 3. *Dromaius*. 4, 5, 6. *Limornis dromicoides*. 7. *Gymnornis gigas*. 8. *Spheniscus*. 9. *Apteryx*.





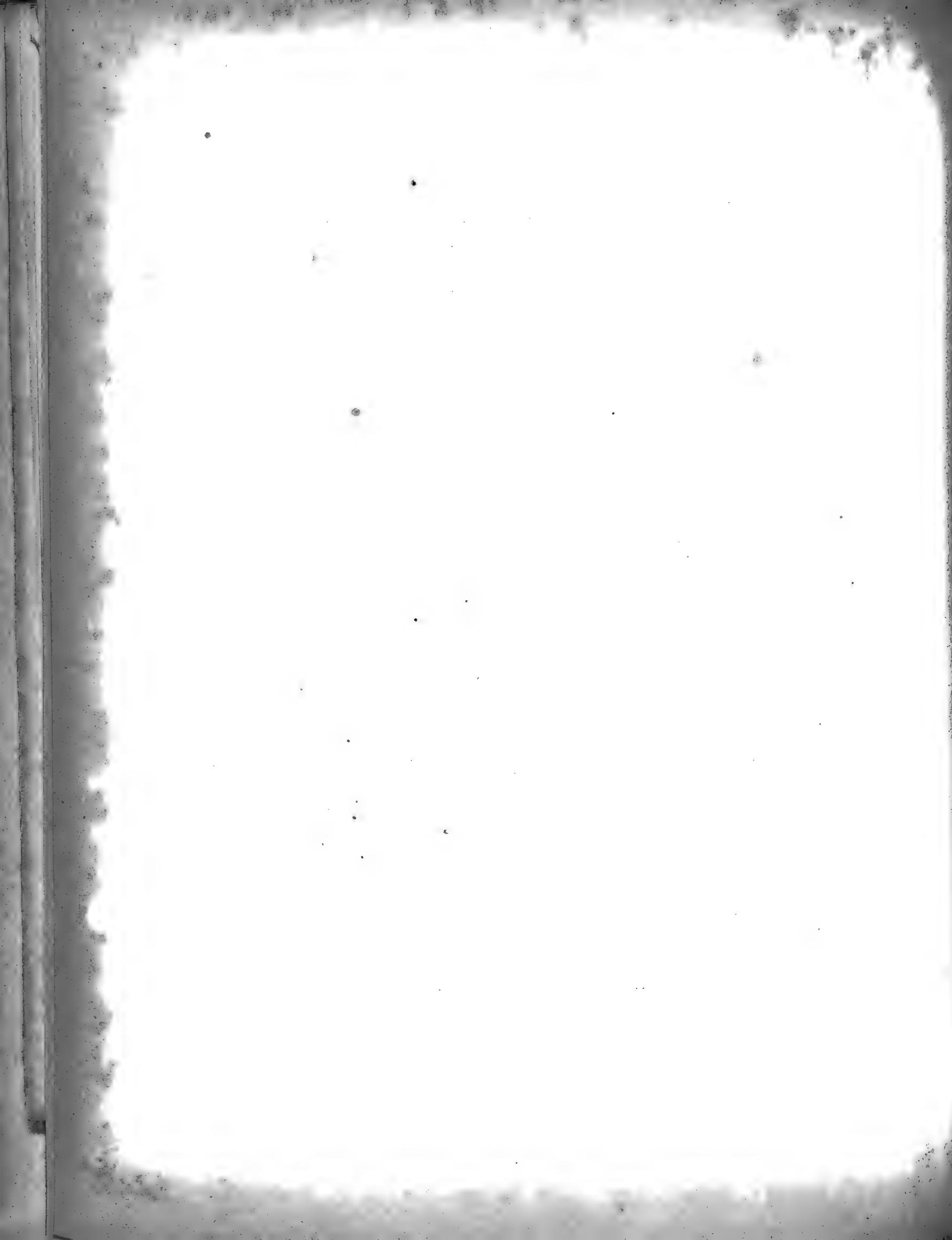
Figures 1-5

Nat. Size

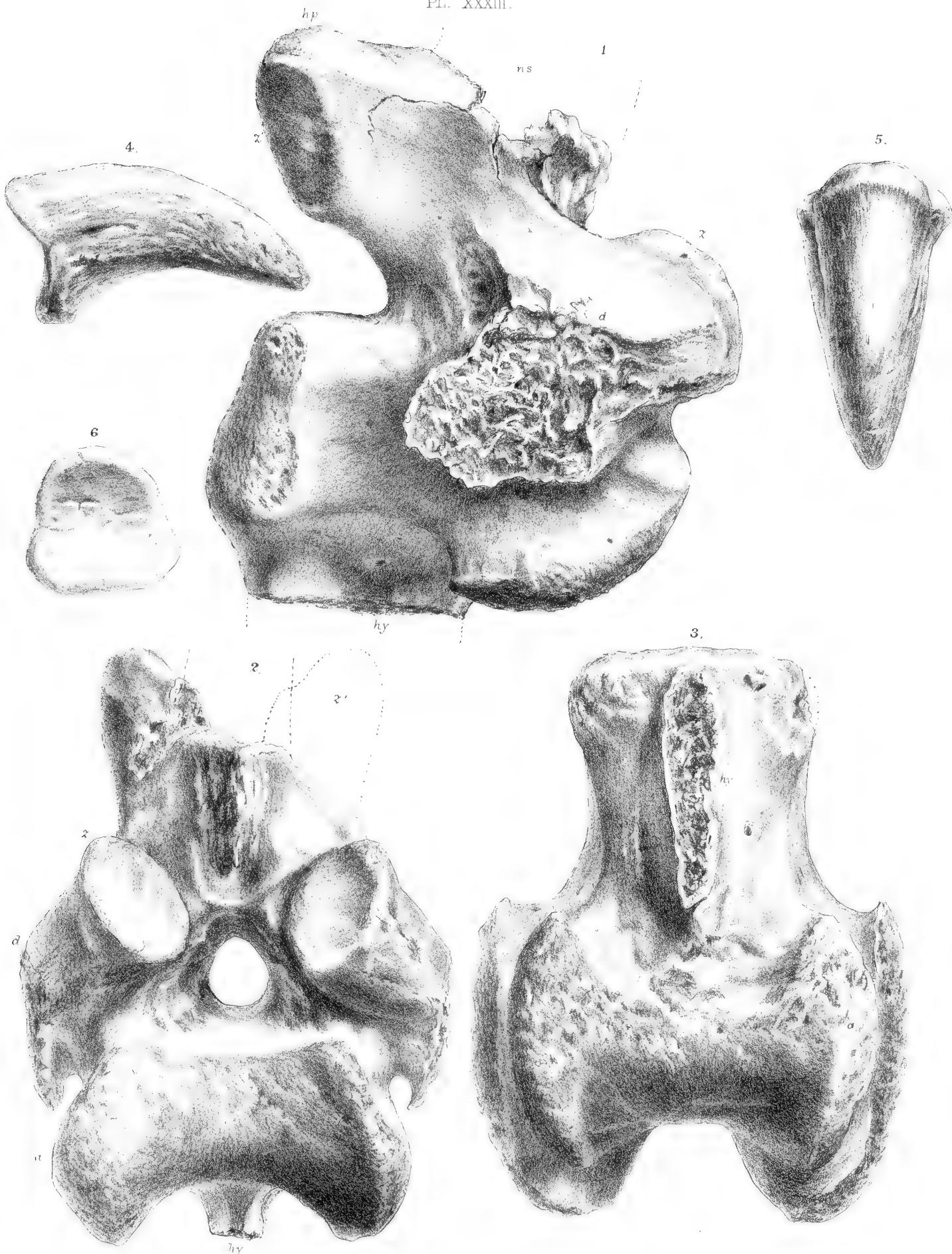
Dag & Flage lith. to the Specm

Current vertebral

1-3 *Otternis angustus* 4-5. *Din gigantus*



PL. XXXII.



Scharf del. H. Olson lith.

W West & C° imp.

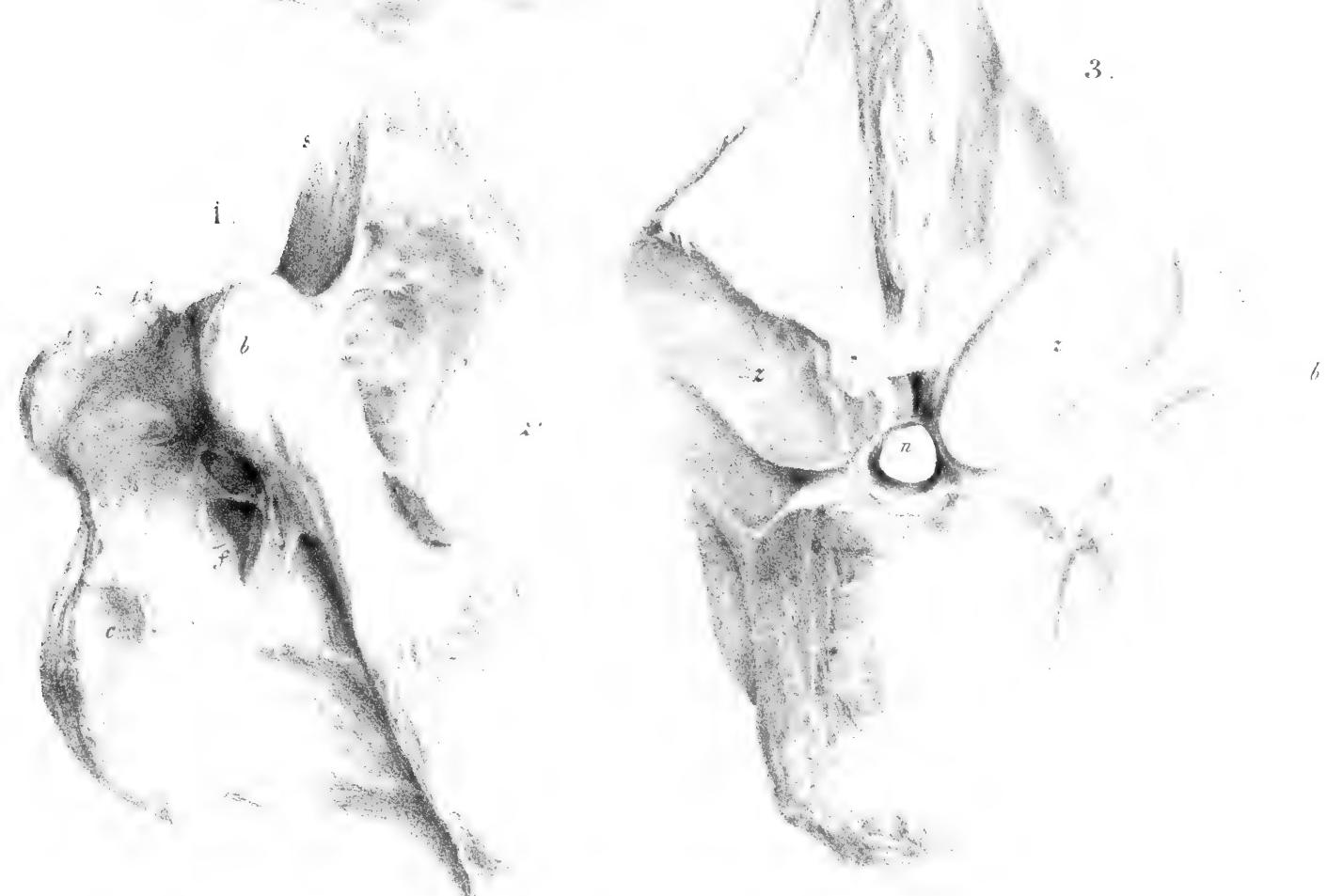
1-3. LOWER CERVICAL VERTEBRA, DINORNIS GIGANTEUS: 4-6. UNGUAL PHALANX.



2.

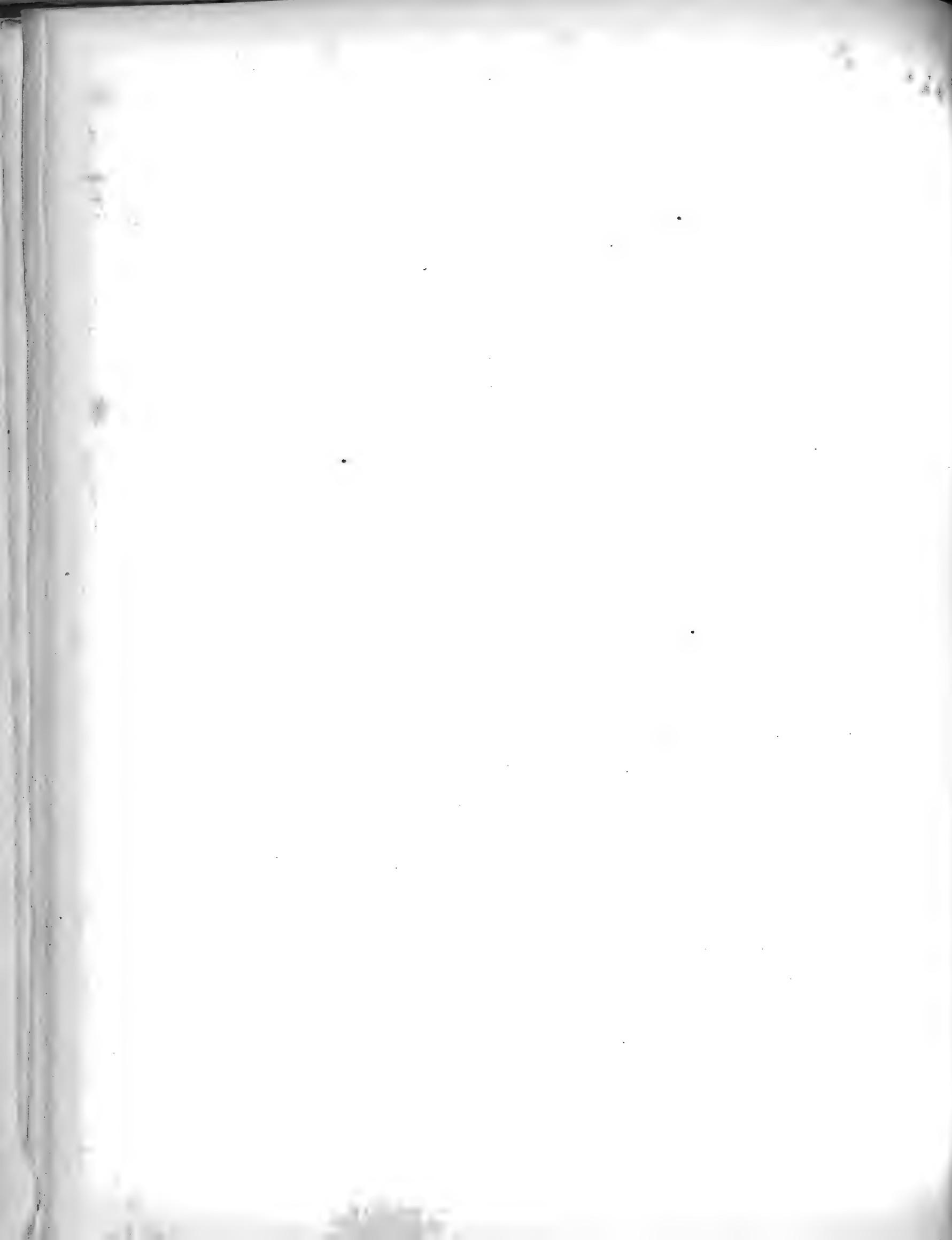


4.

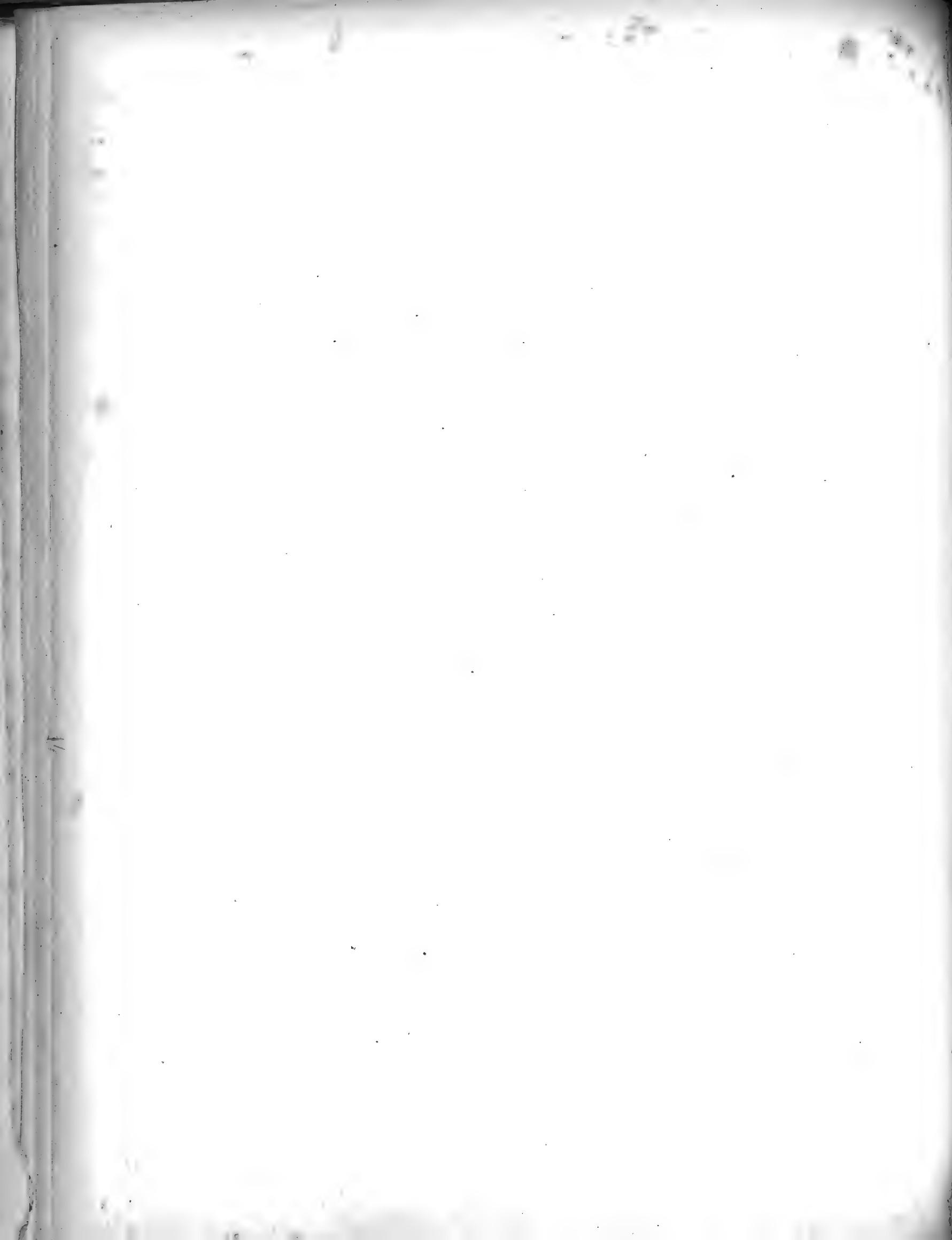


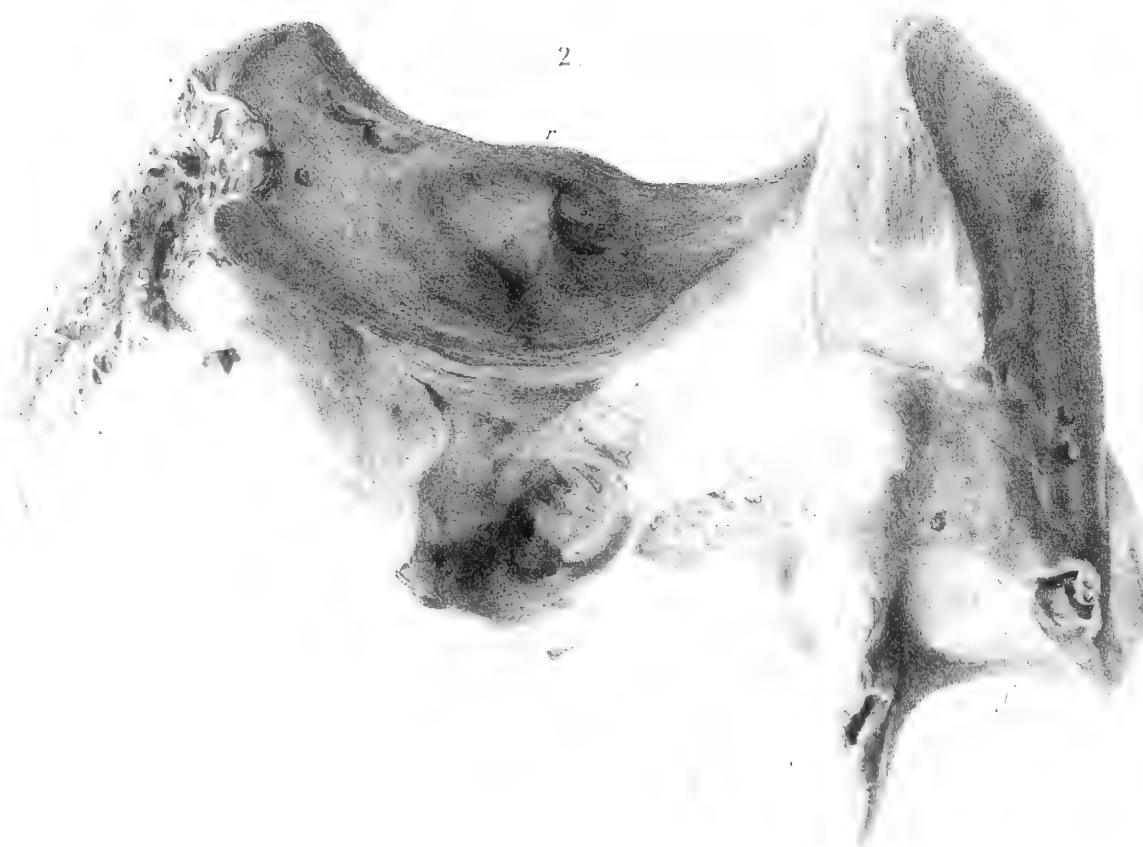
Cervical vertebrae

1. 2. *Dinornis crassus* (?) 3. 4. *Din. ingens*





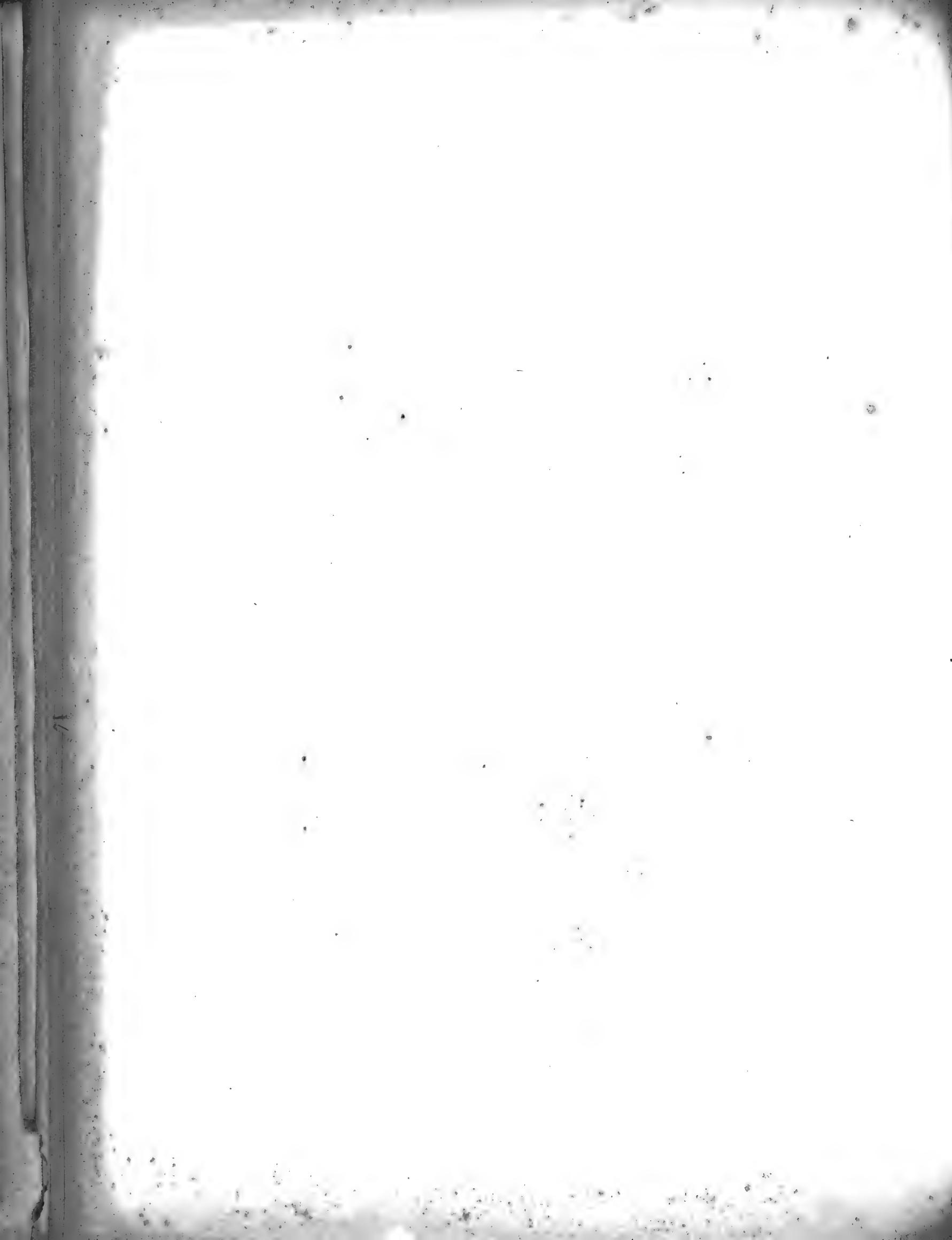




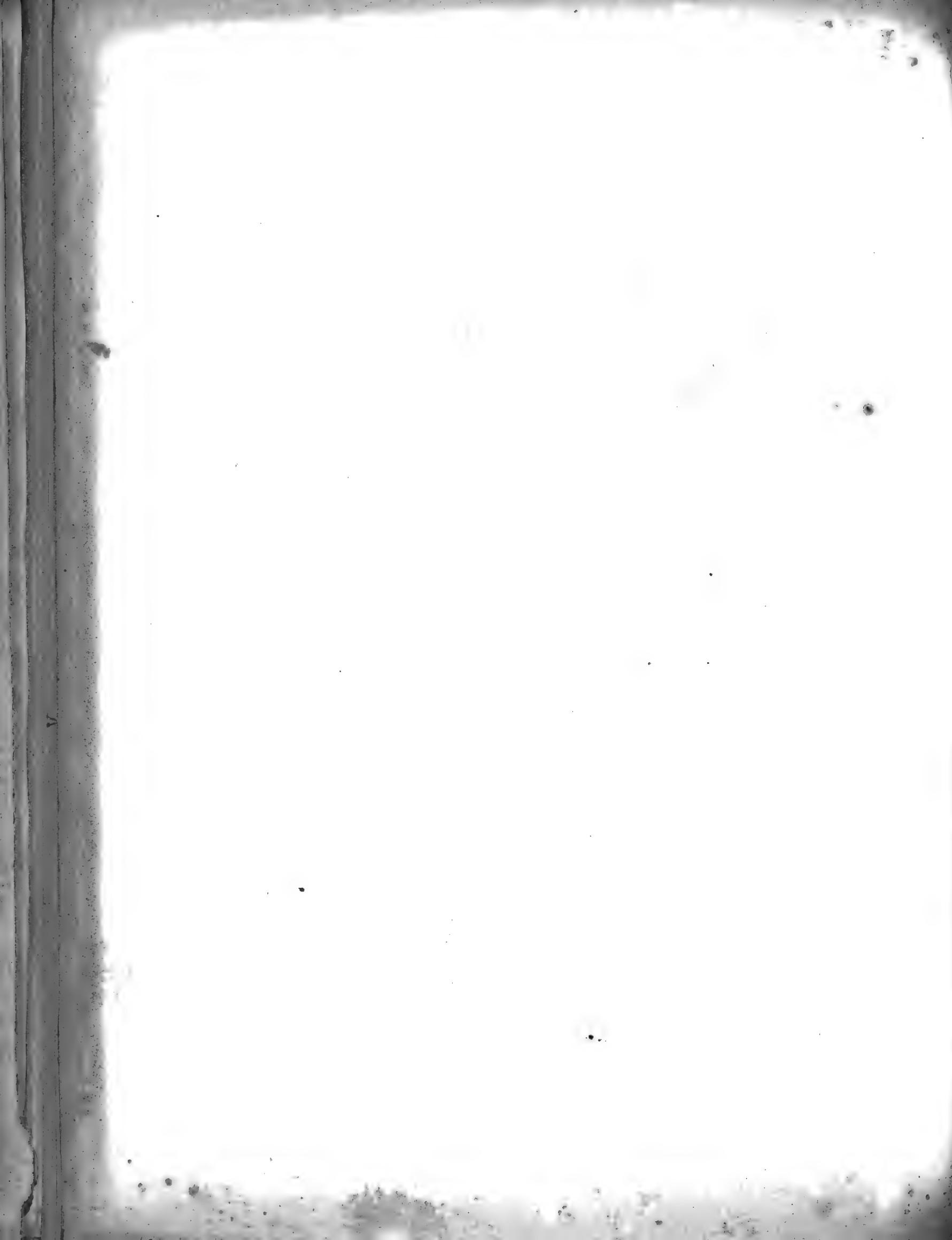
Nat. Size

Tenerus giganteus

1858. Dugbe. 1000'. Mr. Queen







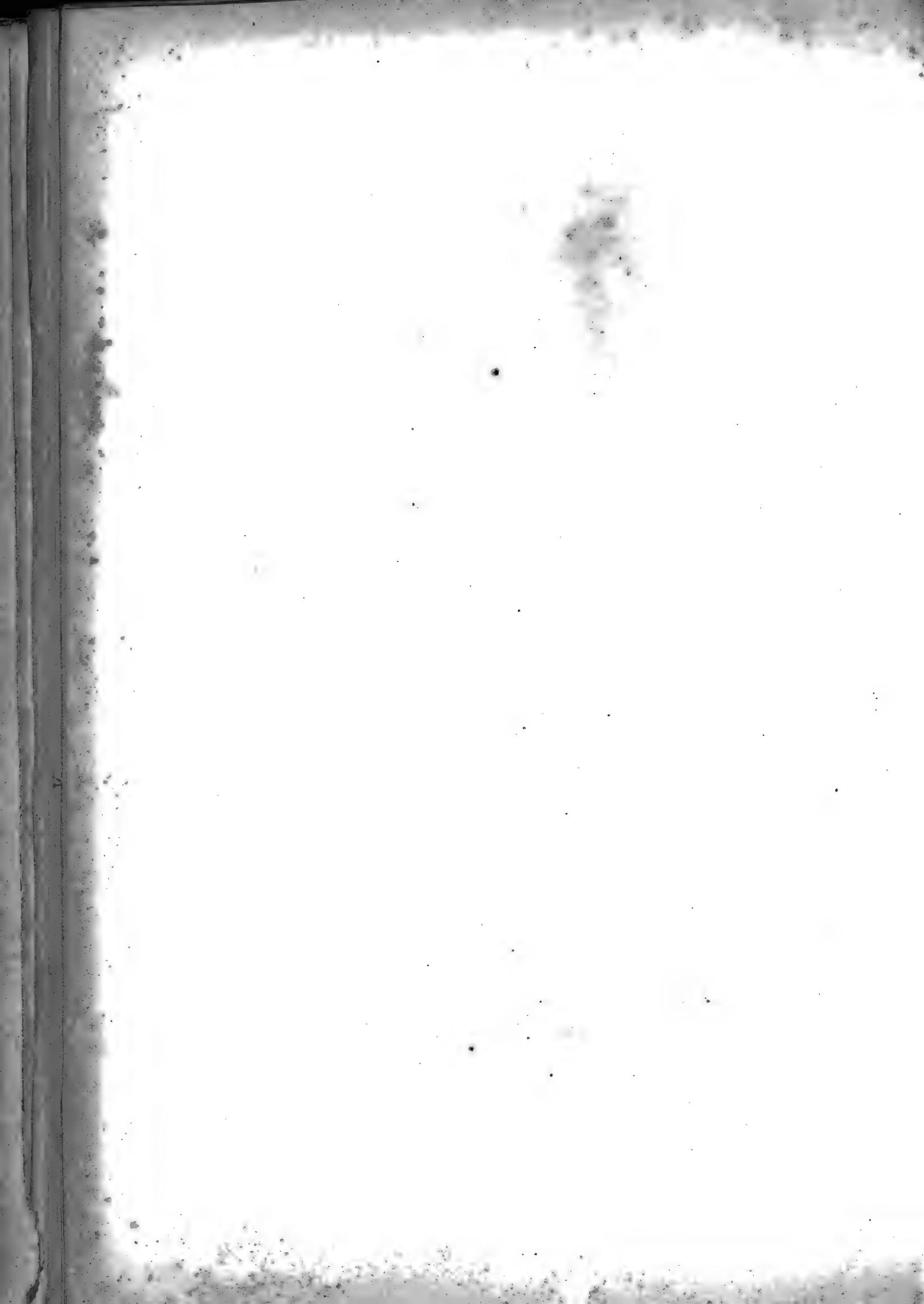


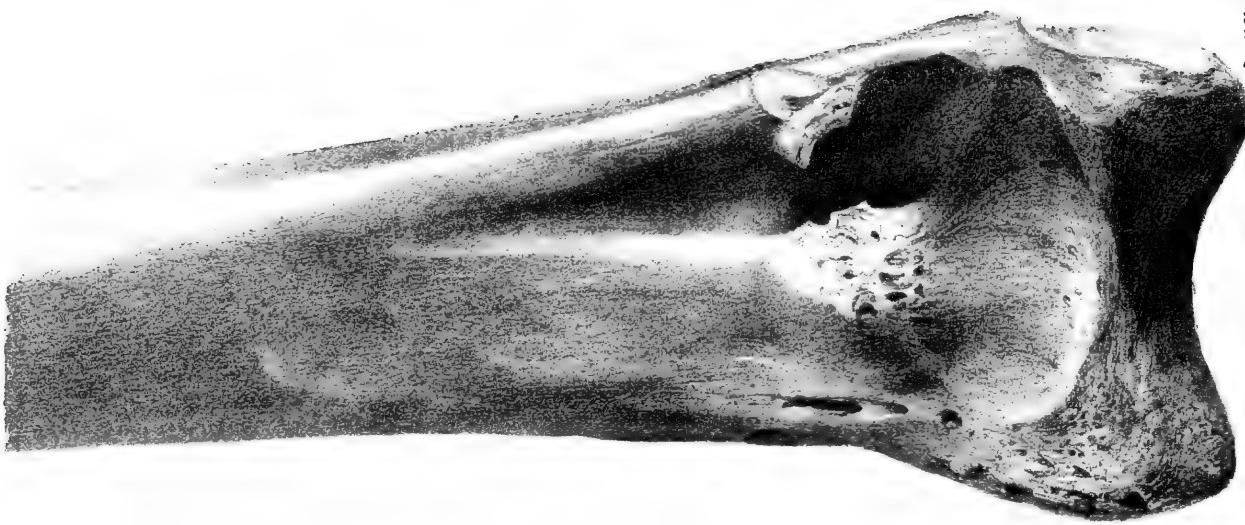
Engraved Line

Nat. Size.

Davy & Hague lith'd to the Queen.

Gymnophorus macularius.





Day & Higgin's Add. to the Queen



Tibia



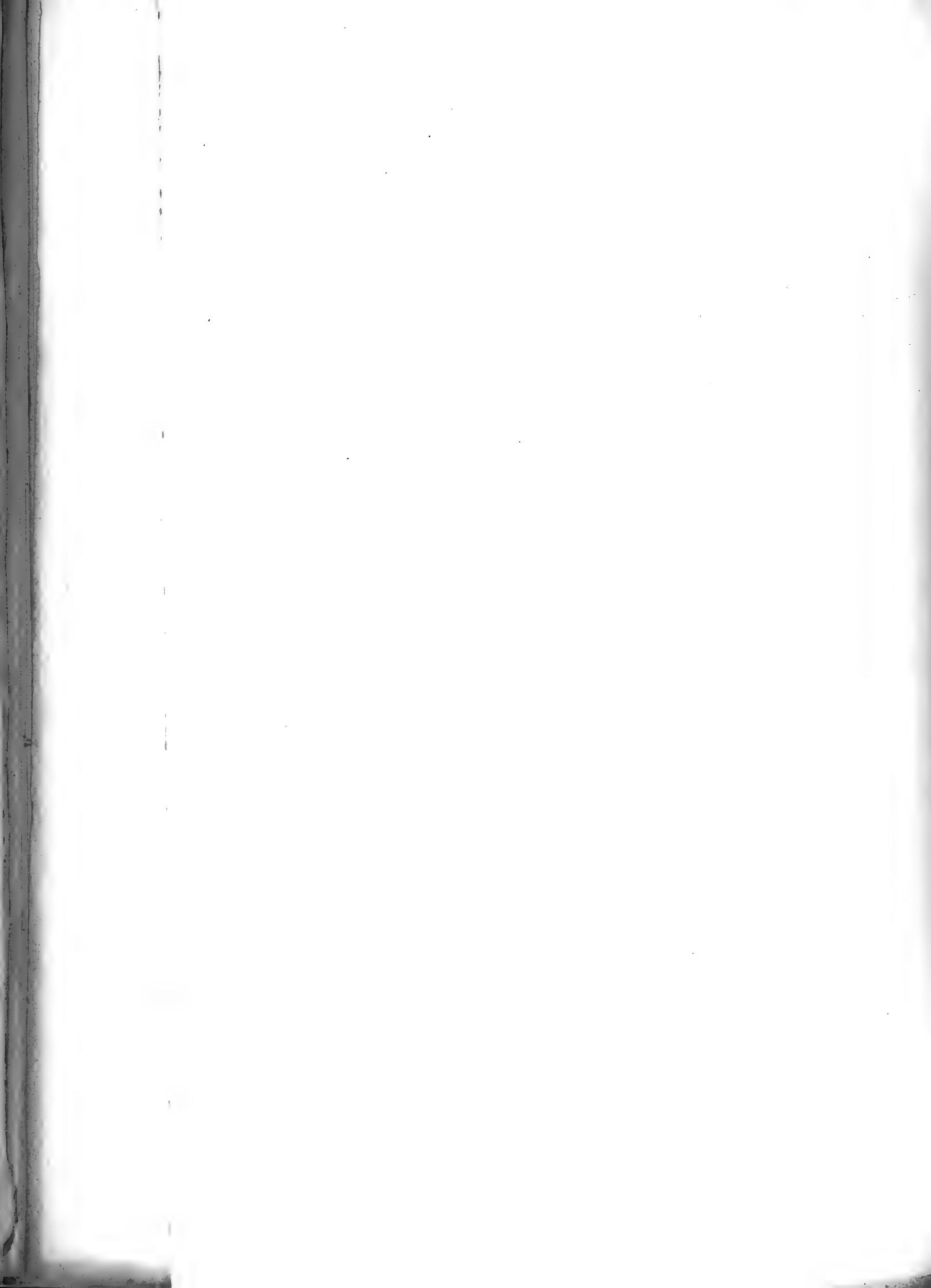
Nat. Size.

Diploceraspis dromaeoides. 2. *Dimorphodon asuarinus* 3—5. *Dim. curvatus*.





1. Chrysoleryx dromocides - 2. *Dinornis australis* 3.- 5. *Din. curvus*.





J. E. Blodget's Spec.

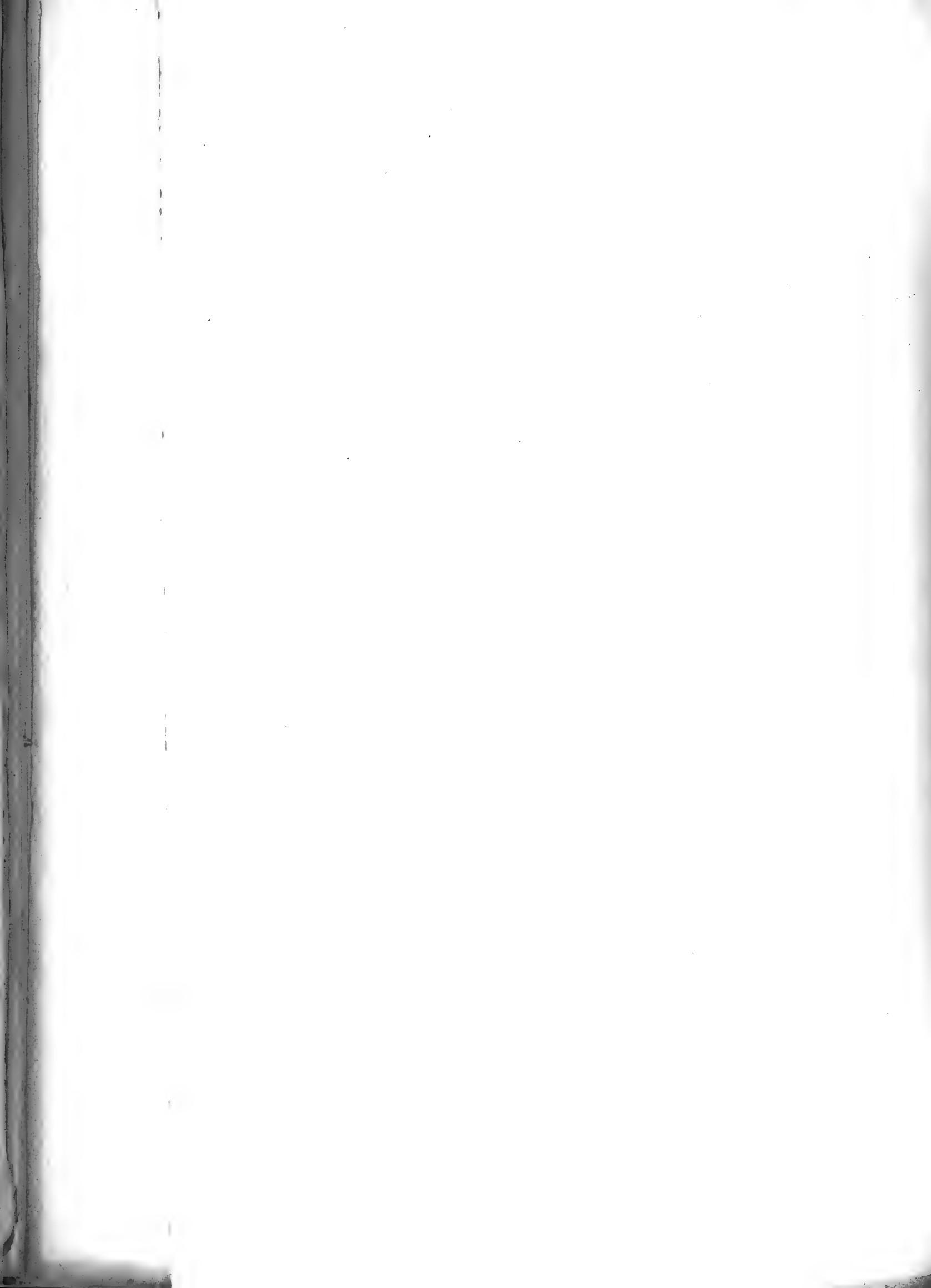
Nat. Size.

Dag & Haga Lith. to the Queen.

Carlo -

metatarsus

2 *Ceramus ingens* 2 *Din obonioides* - 3 *Din miliarius* 4 5 *Din cryptus* 6 *Din curvus*.



Pt. XI.

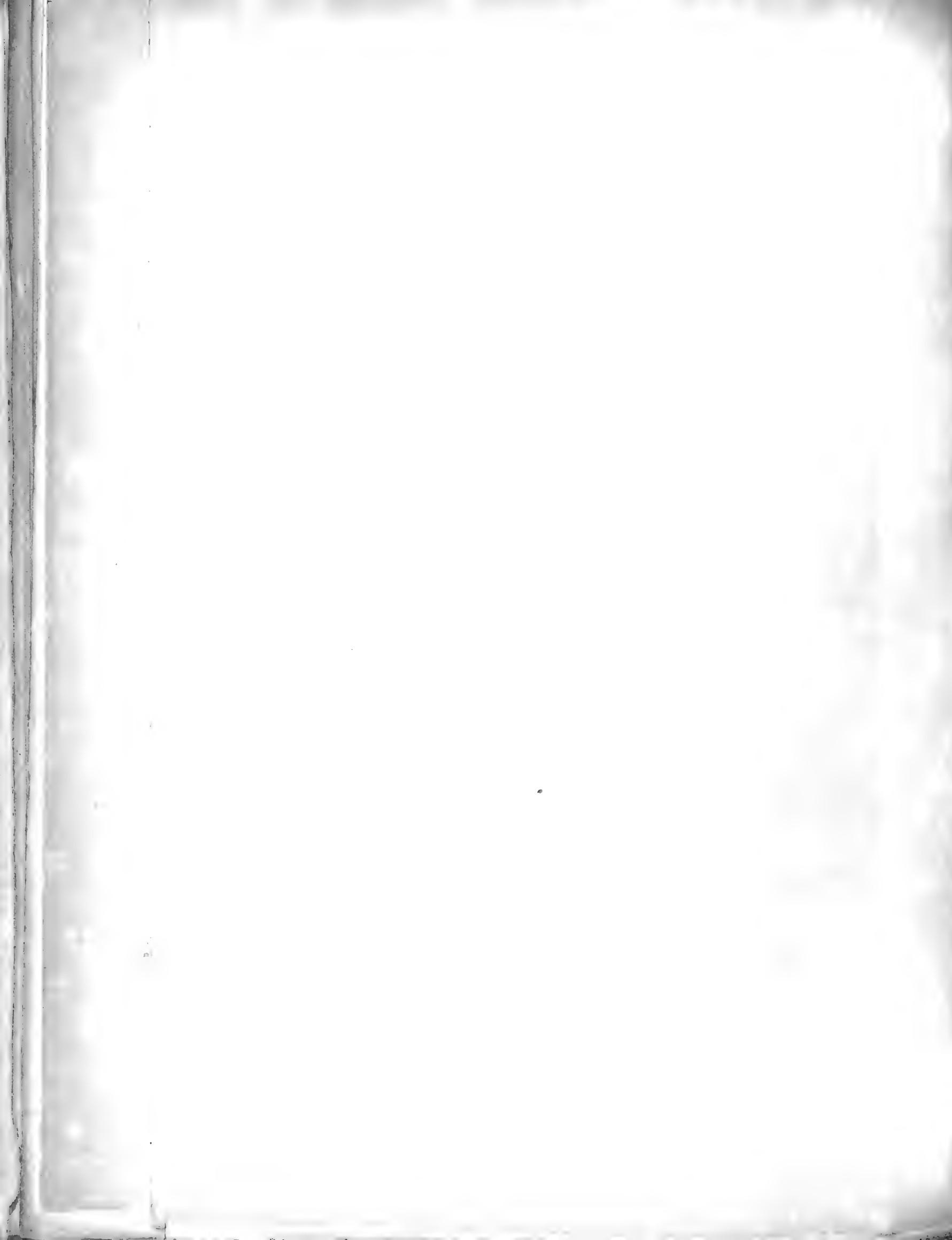


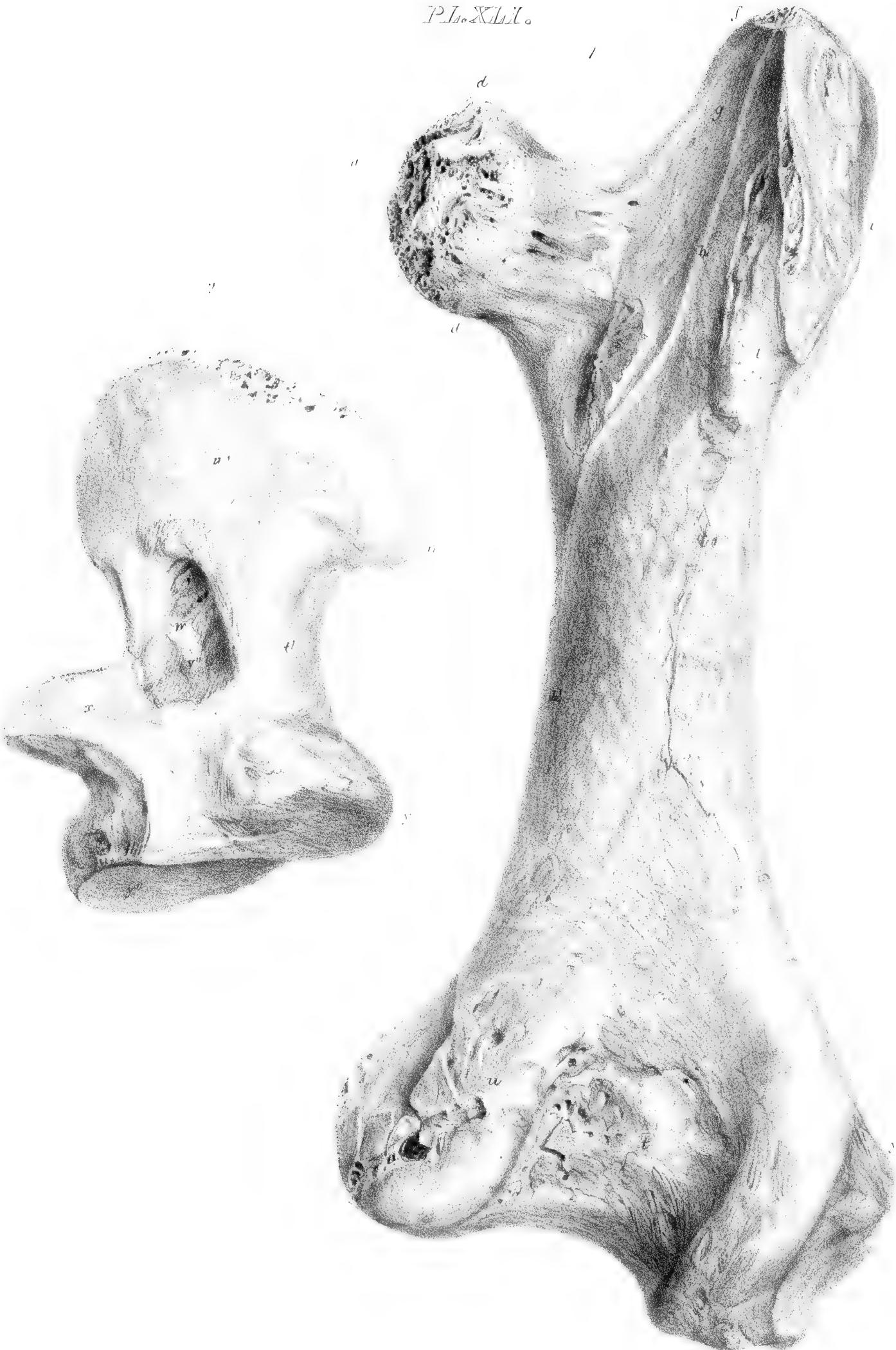
J. Frith's Line

Tarso - metatarsus

Prof. H. C. Oberholser

1. *Sturnus vulgaris* 2. *Dinornis ingens* 3. *Dinornis australis* - 4. 5. *Dinornis* 6. *Dinornis*.











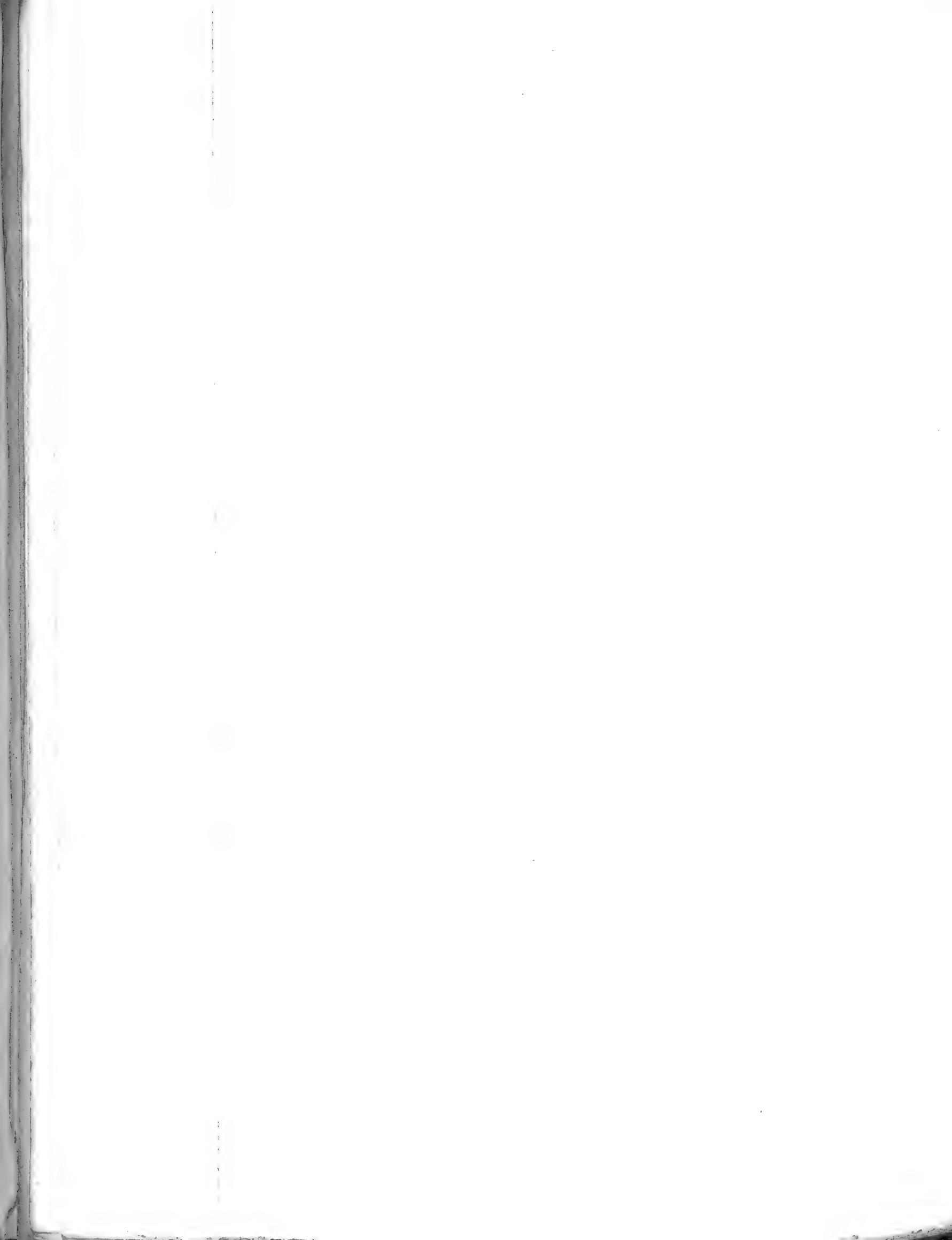


3. DROMAIUS; 4. GIRAVITIS.

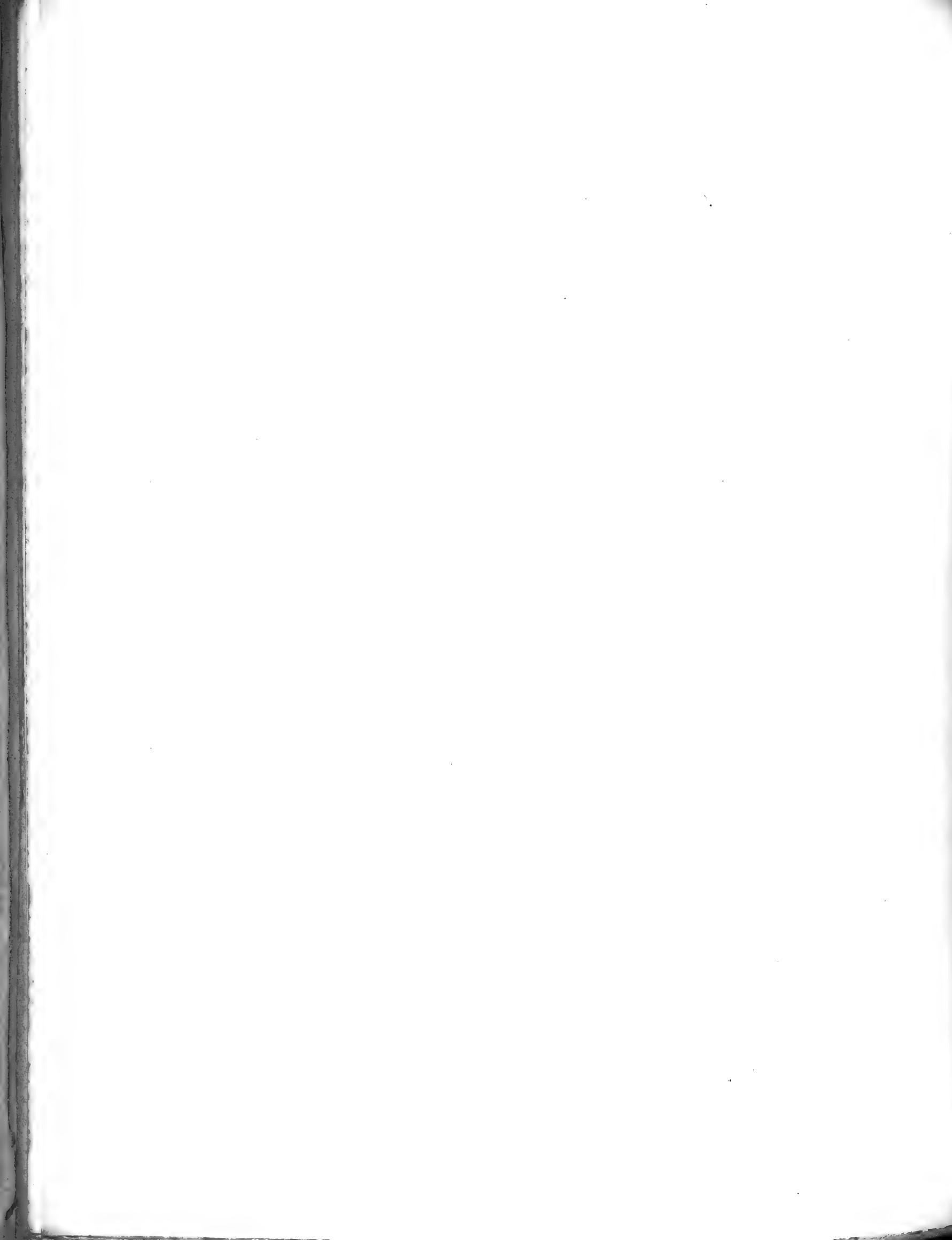
Formation of the Vertebrates

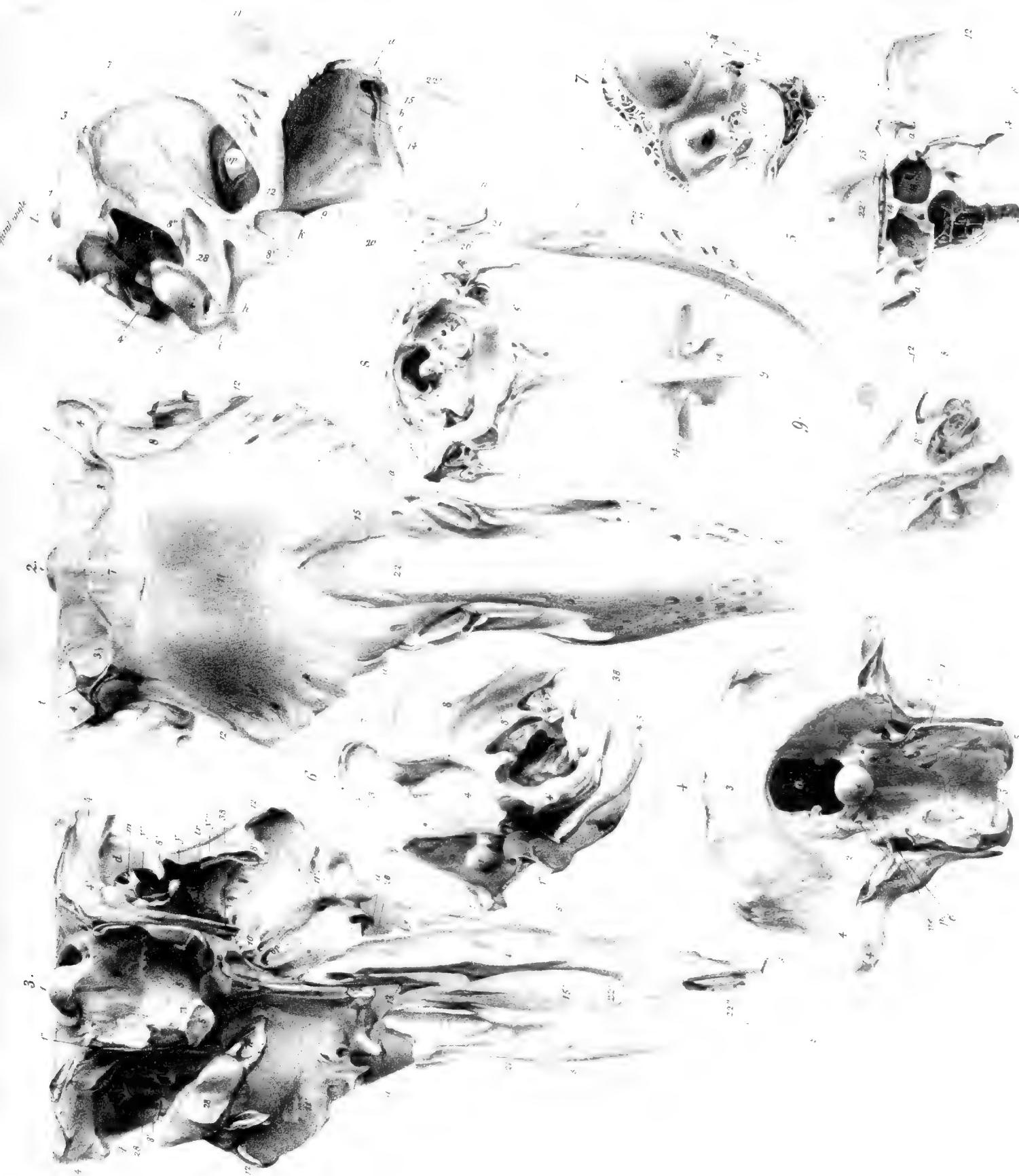


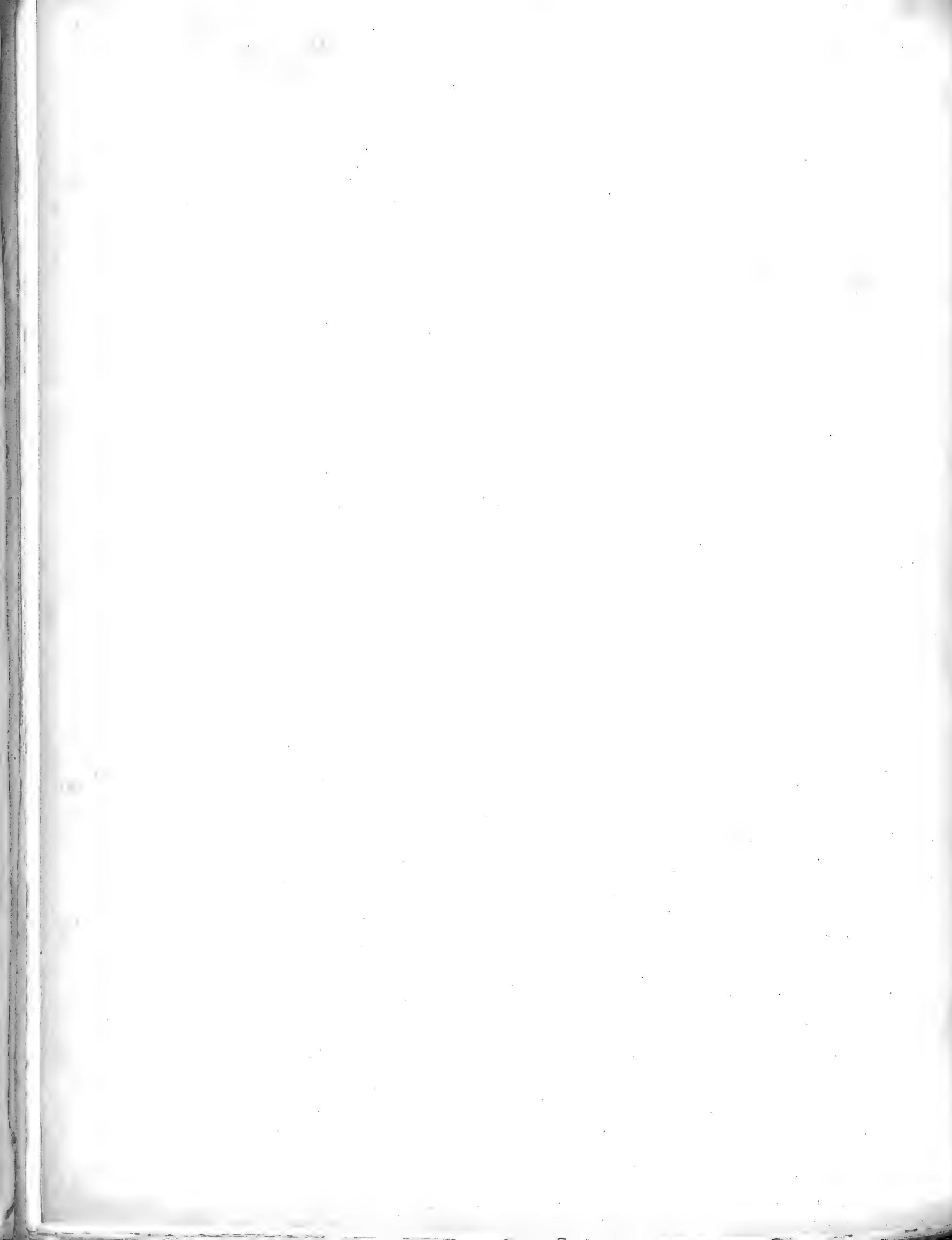












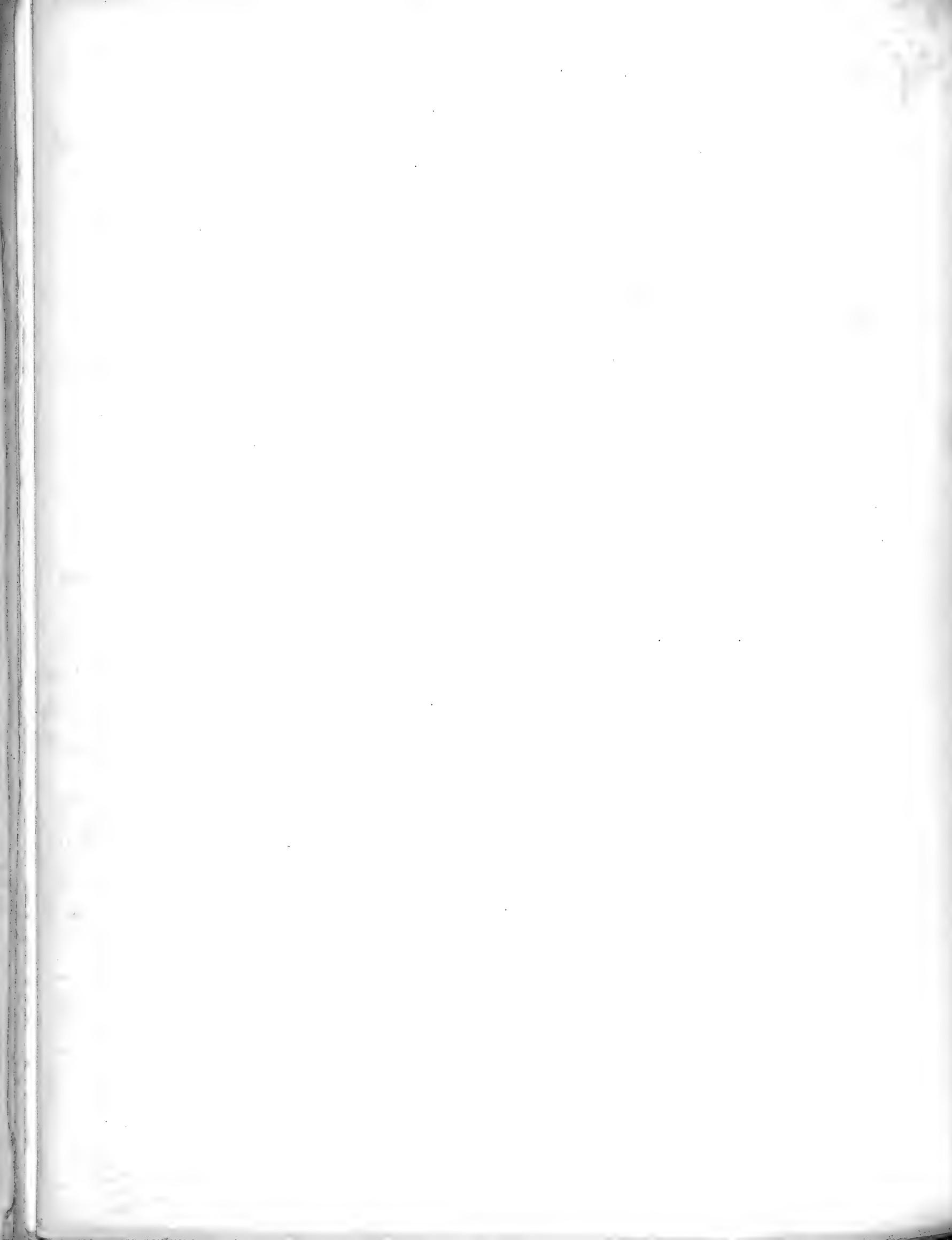


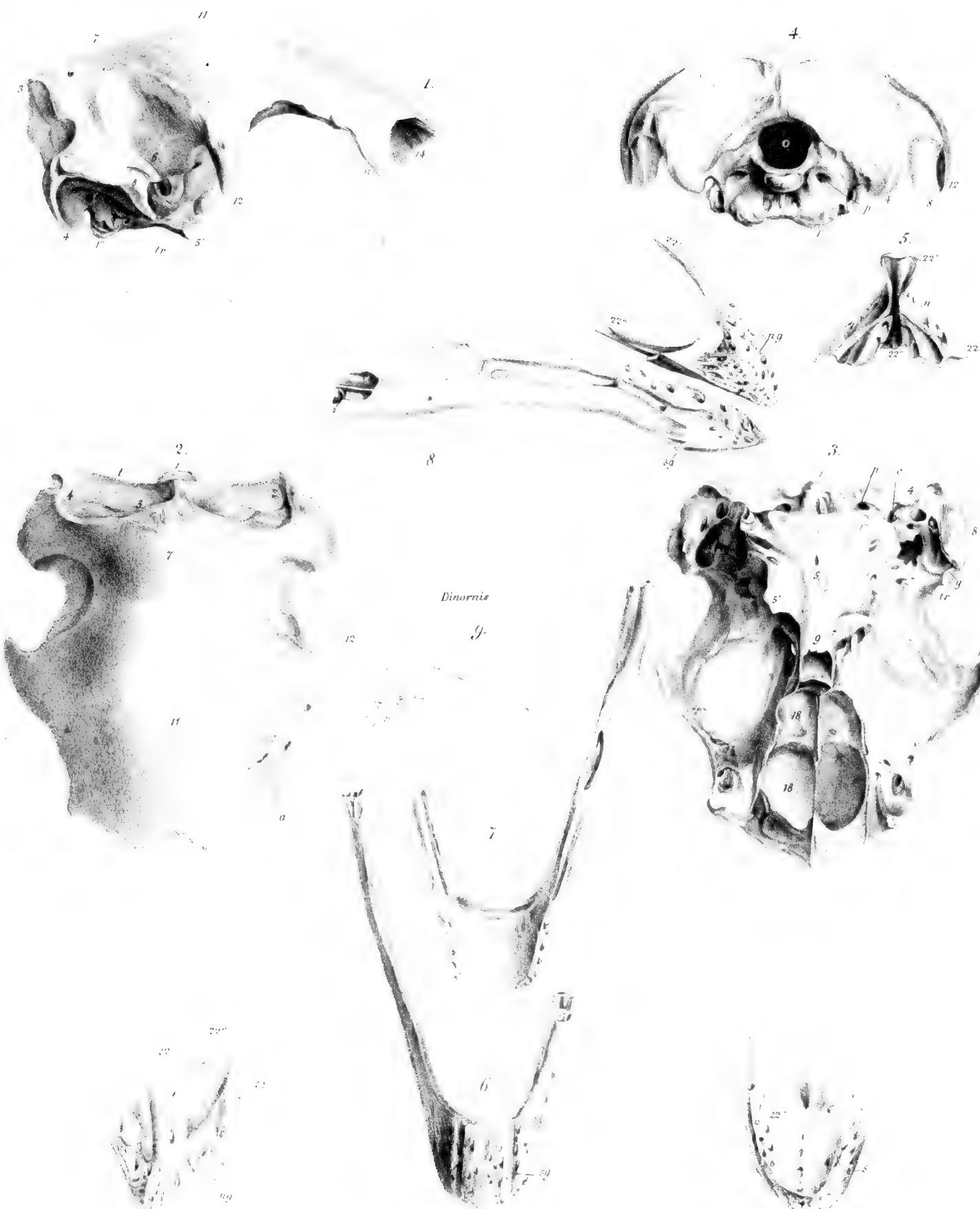
From Nature on Zinc by J. Erxleben.

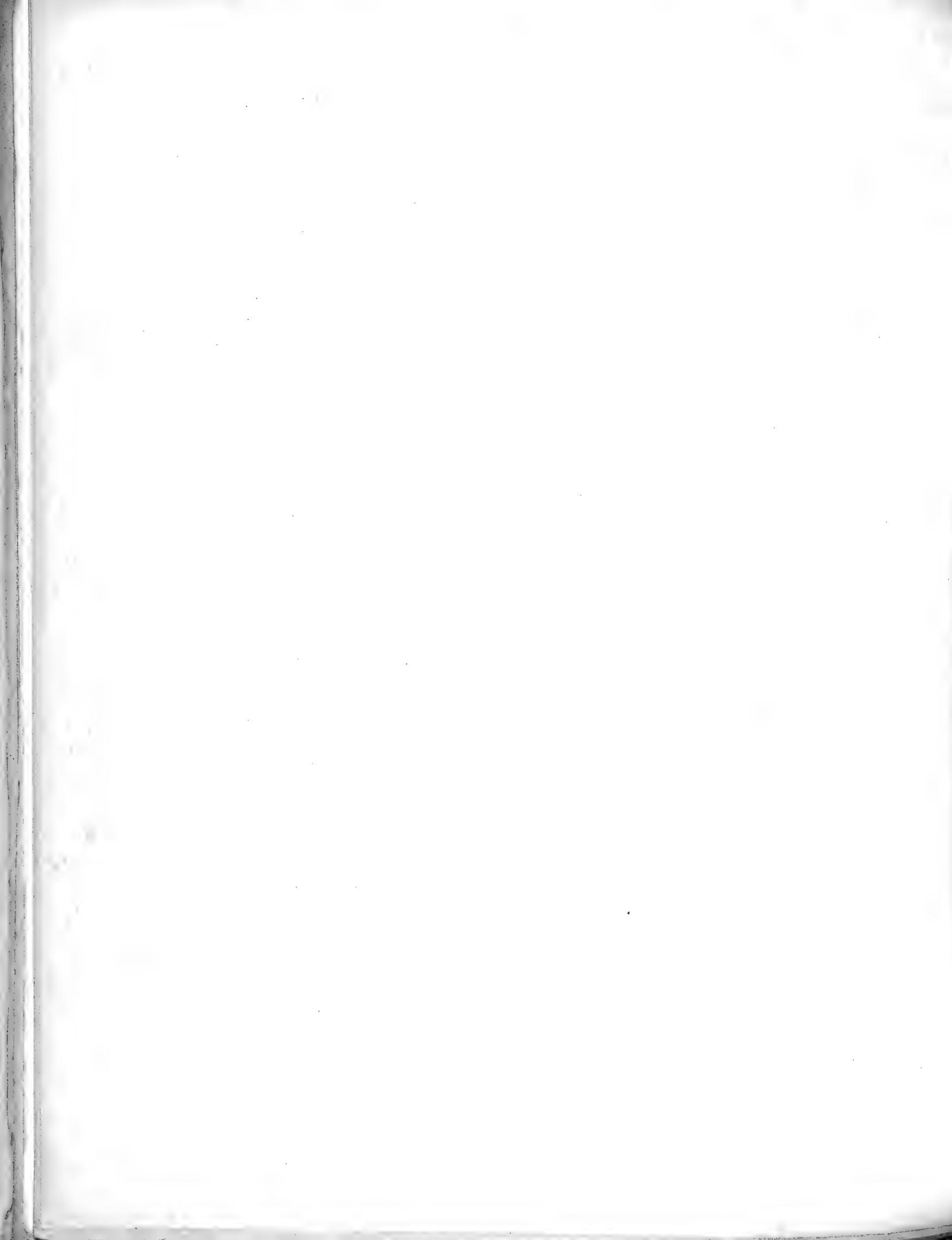
Nat. Size.

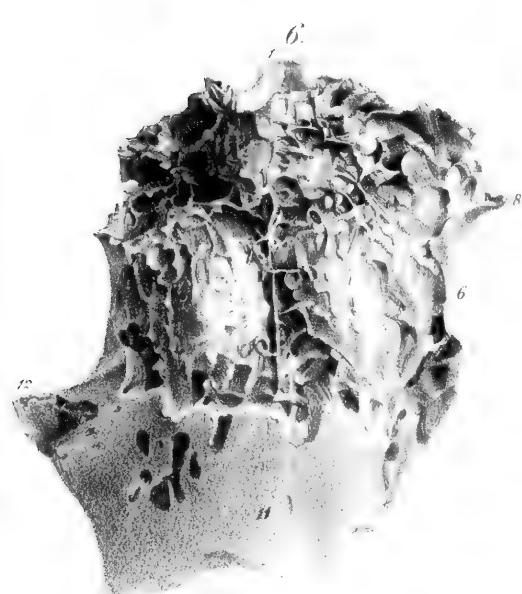
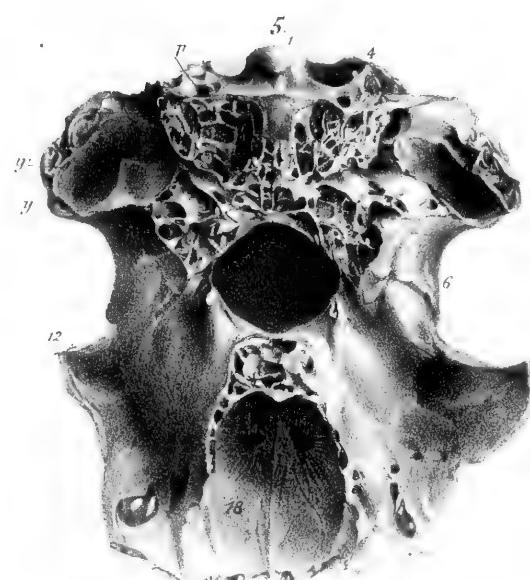
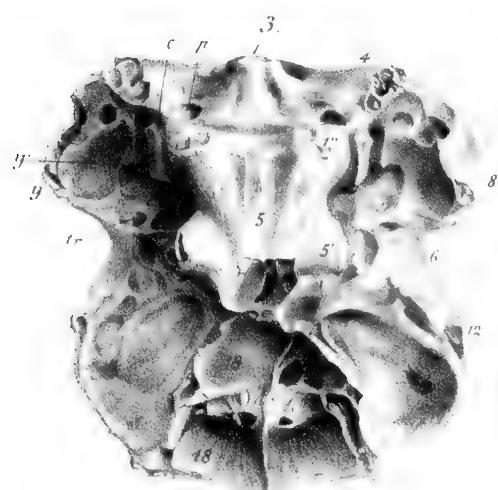
Day & Son Lith^{rs} to the Queen.

1.-2.-3.-8.-9.-10. *Dinornis*. 4.-5.-6. *Struthio*. 7. *Palapteryx*. 11.-12. *Vestor*.



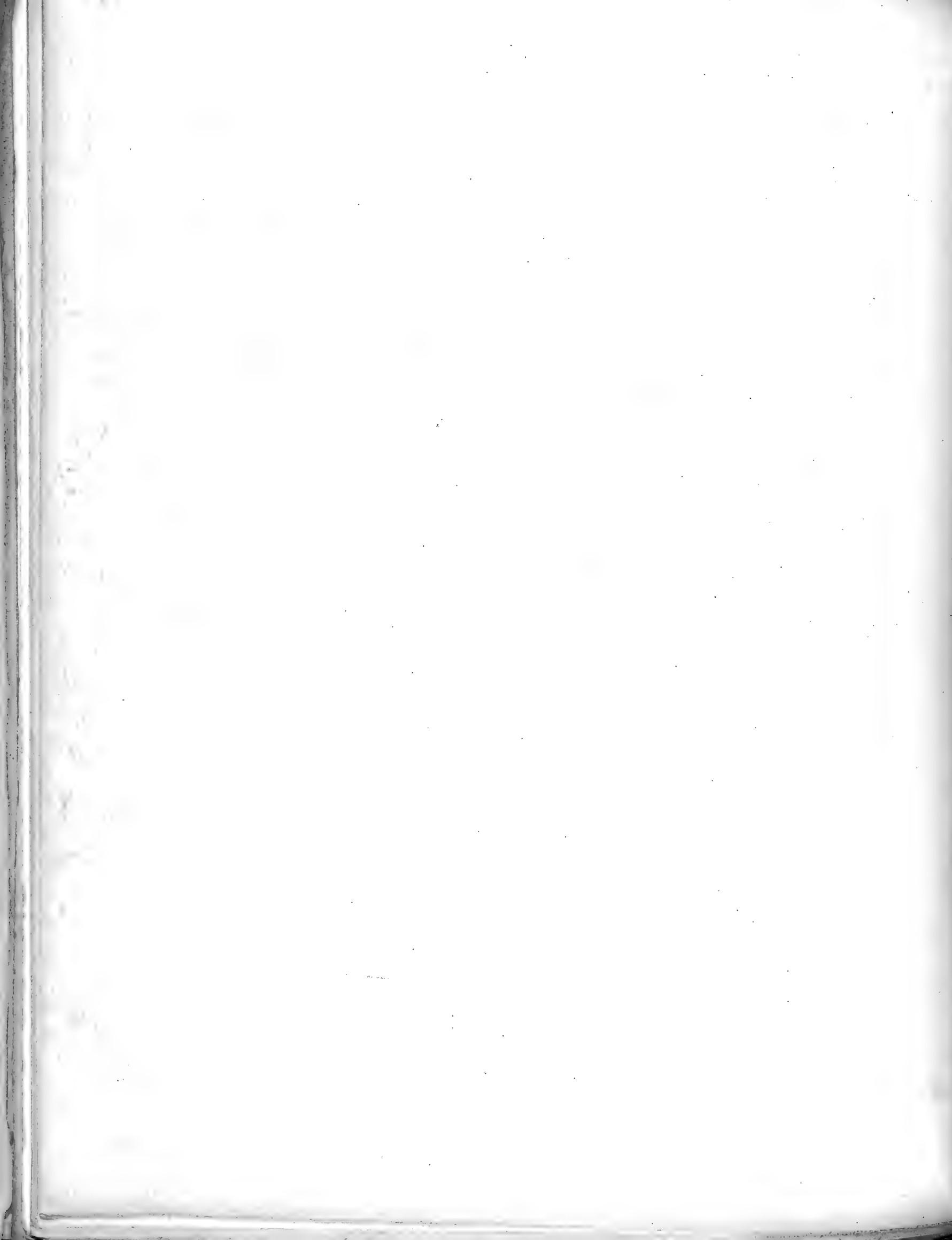


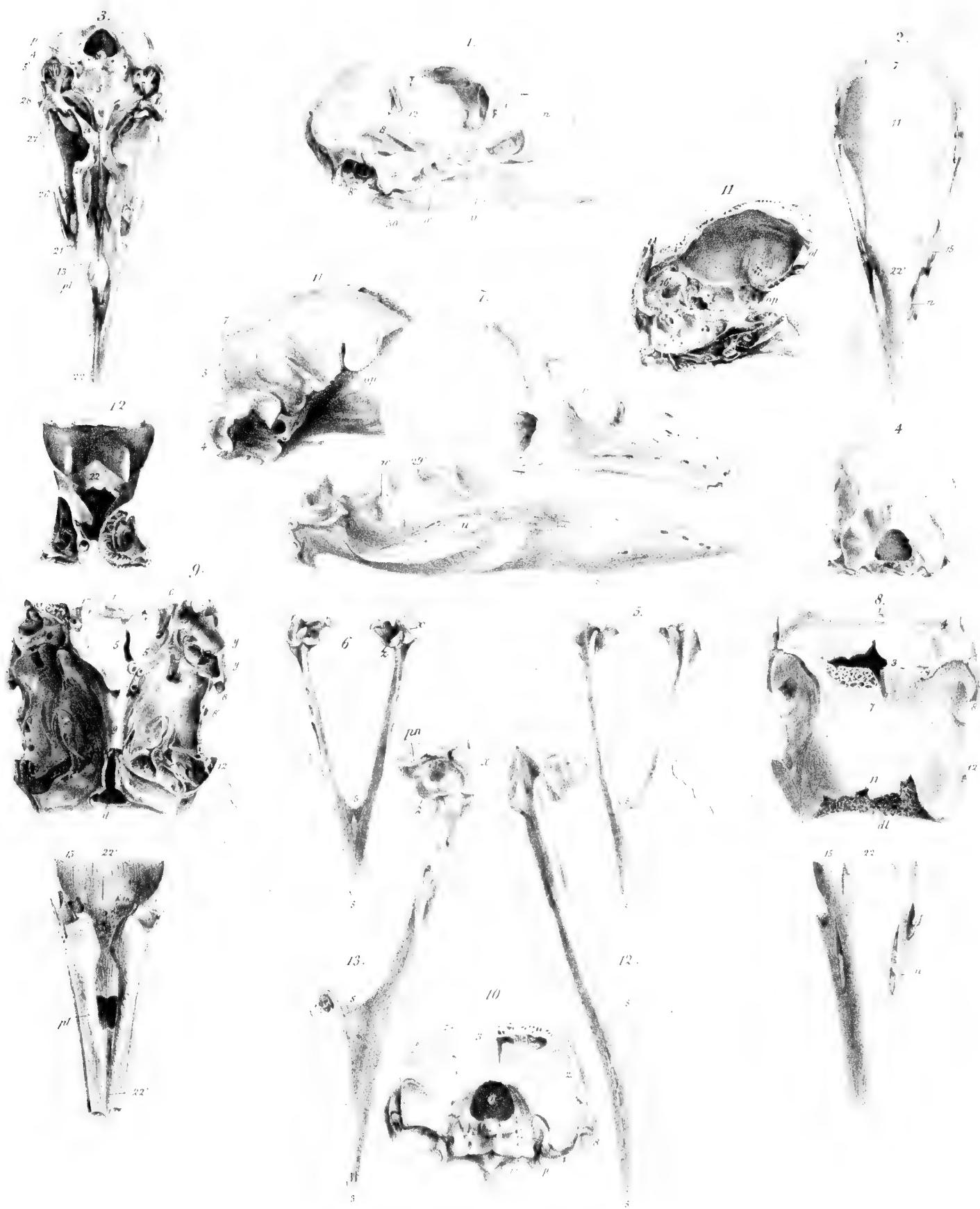


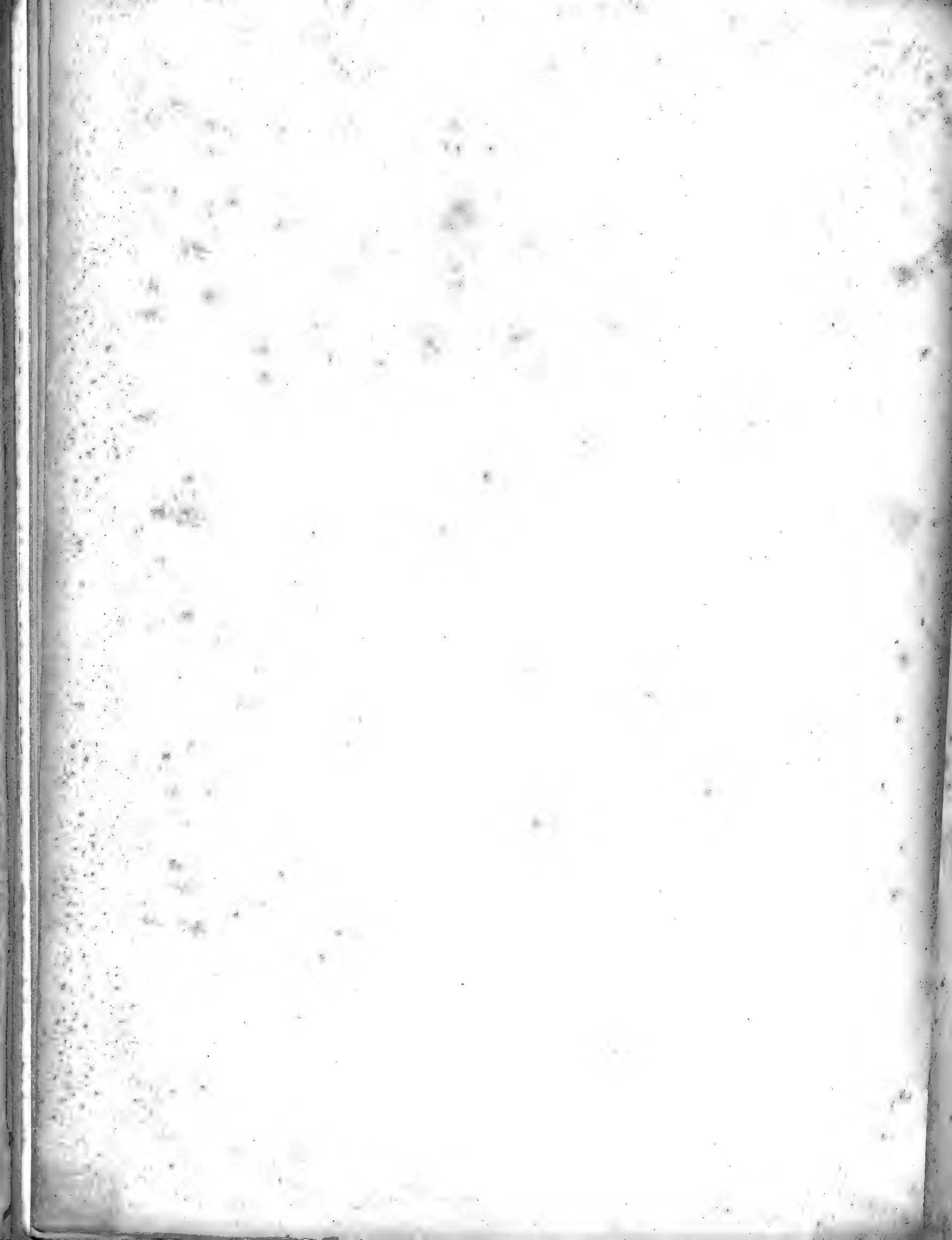


Nat. Size.

Palapteryx

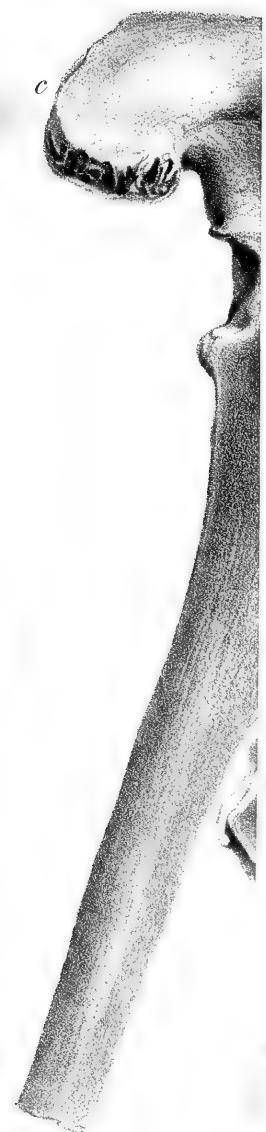


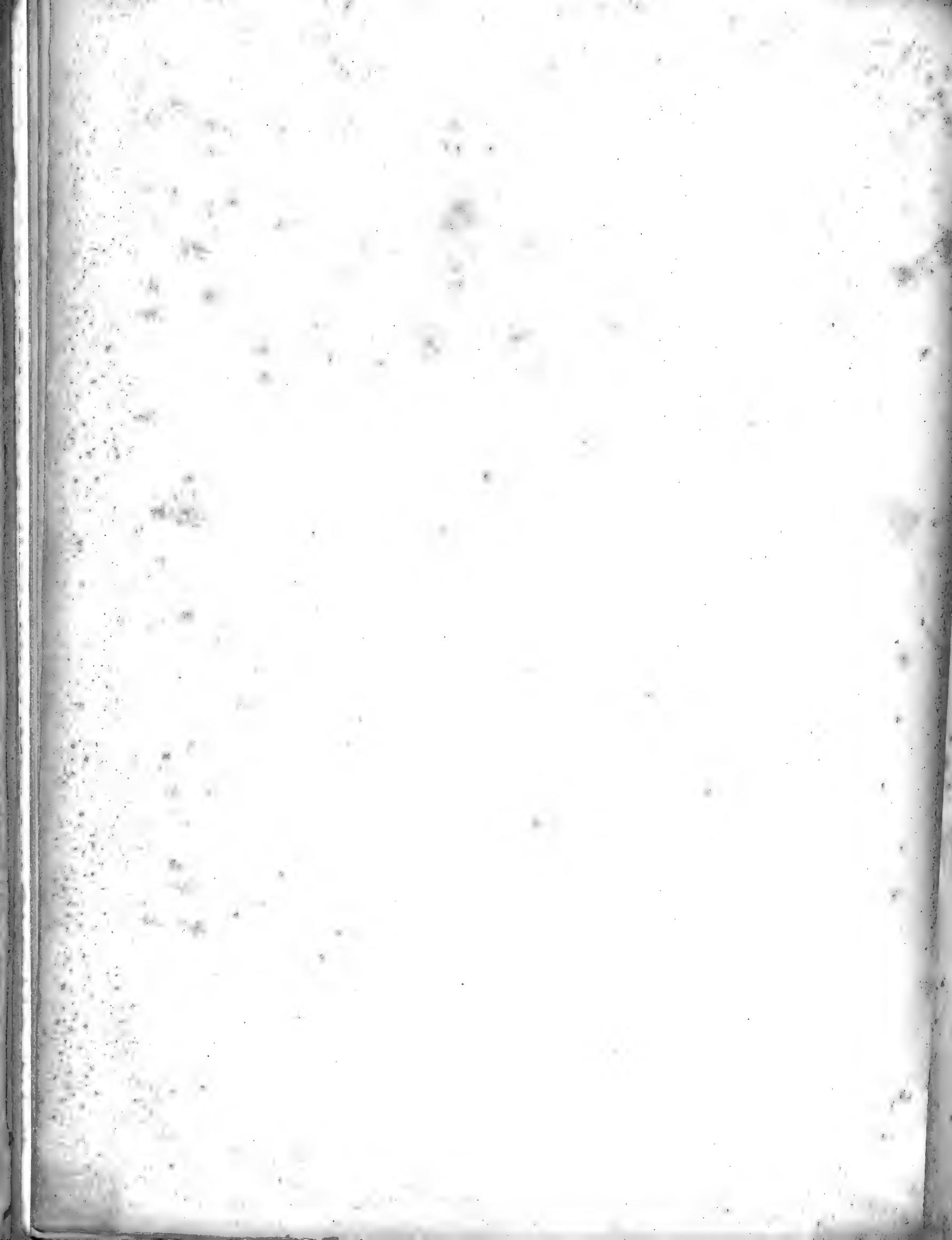




Dax & Son Lith^r to the Queen

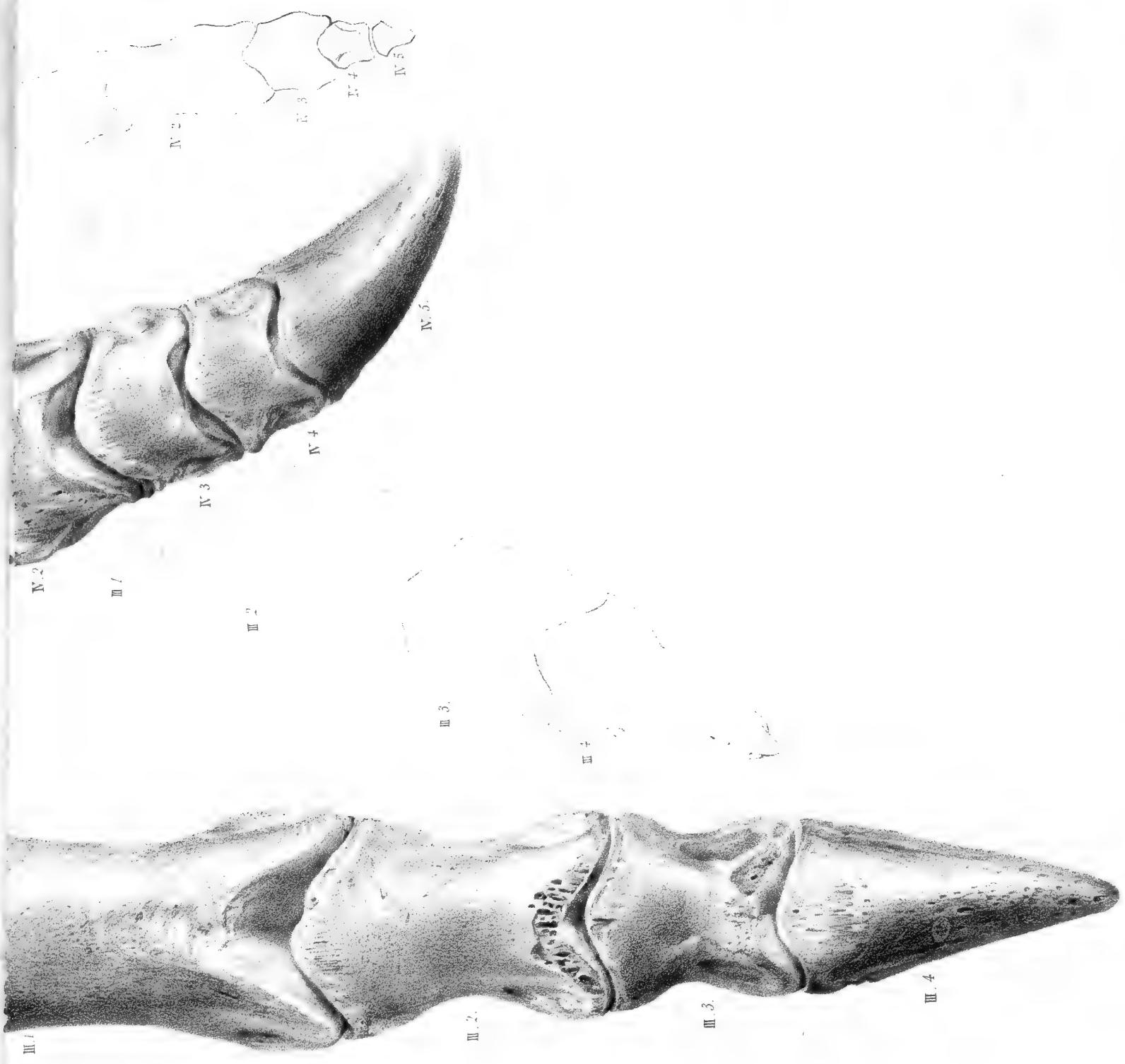
Palapteryx robustus.







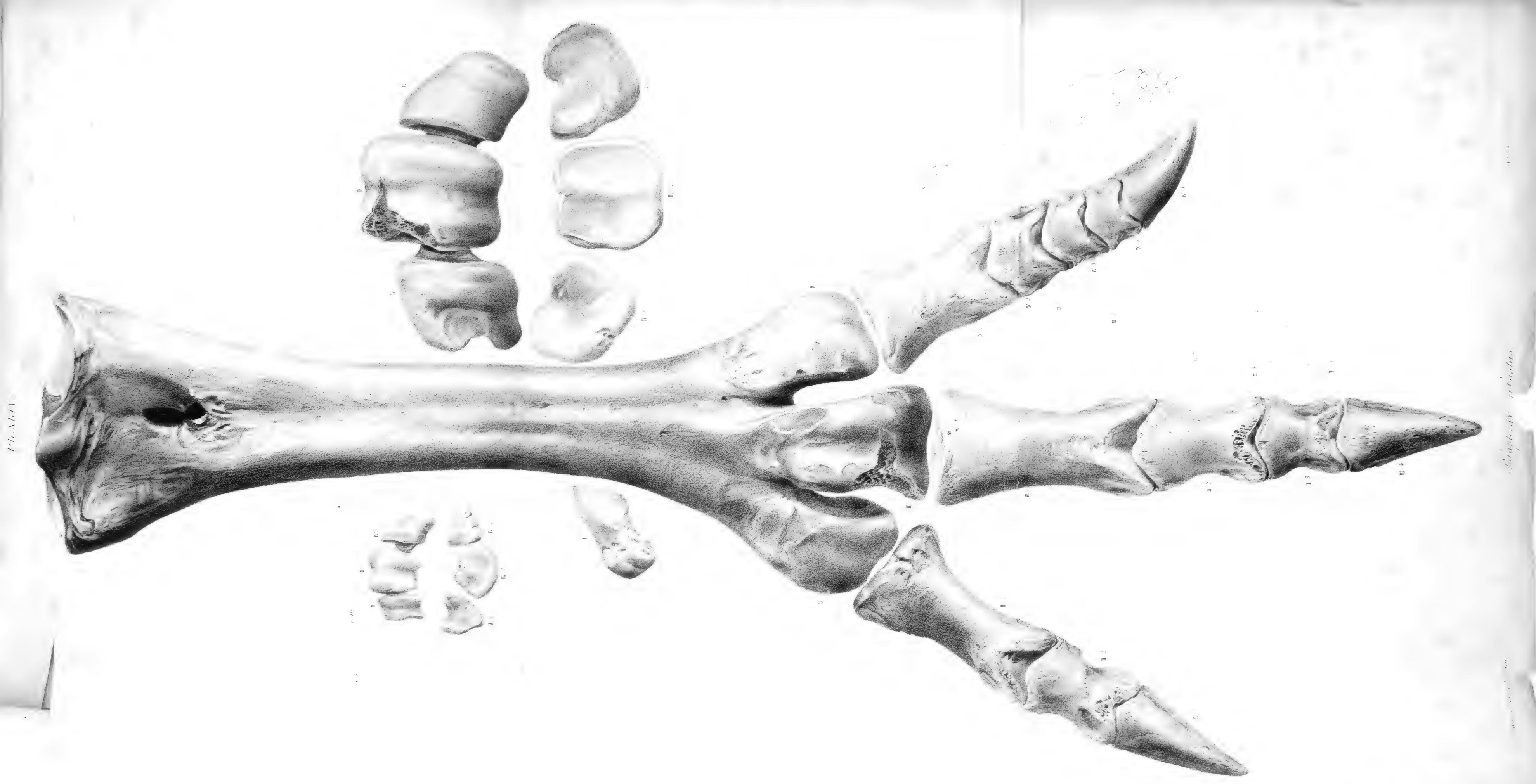




Galapagos robustus.

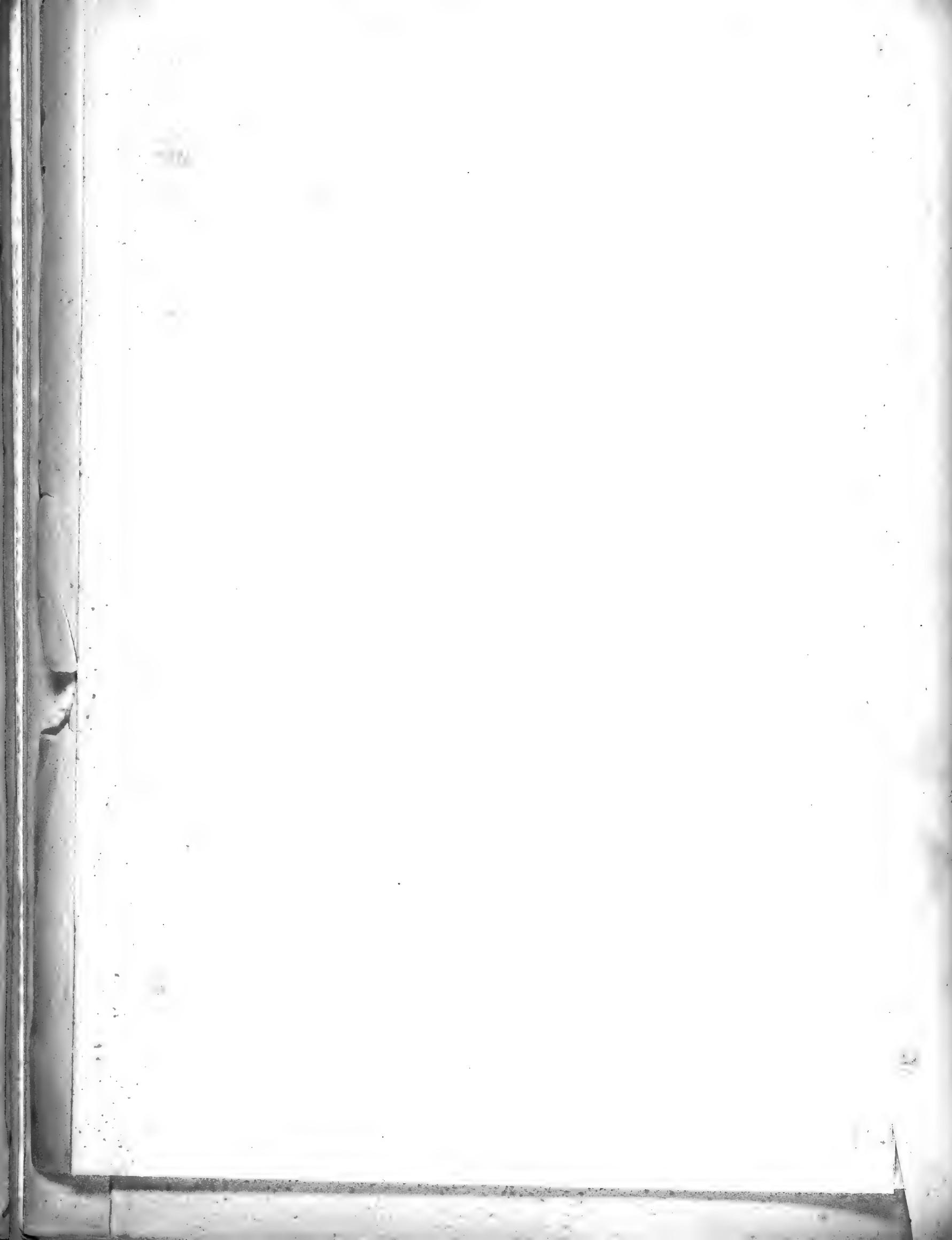
Figures of the shells of the Galapagos







Pho μ_0



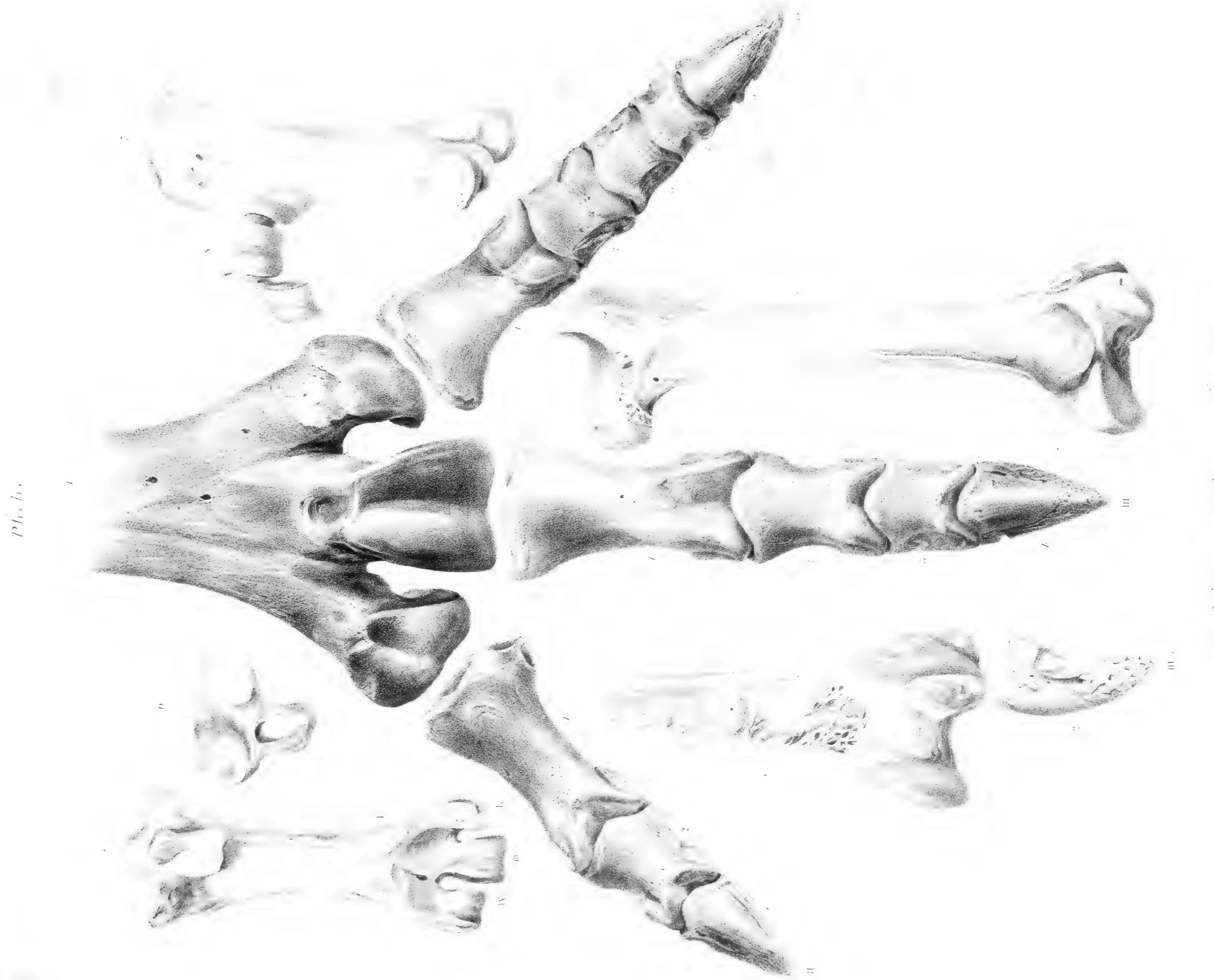
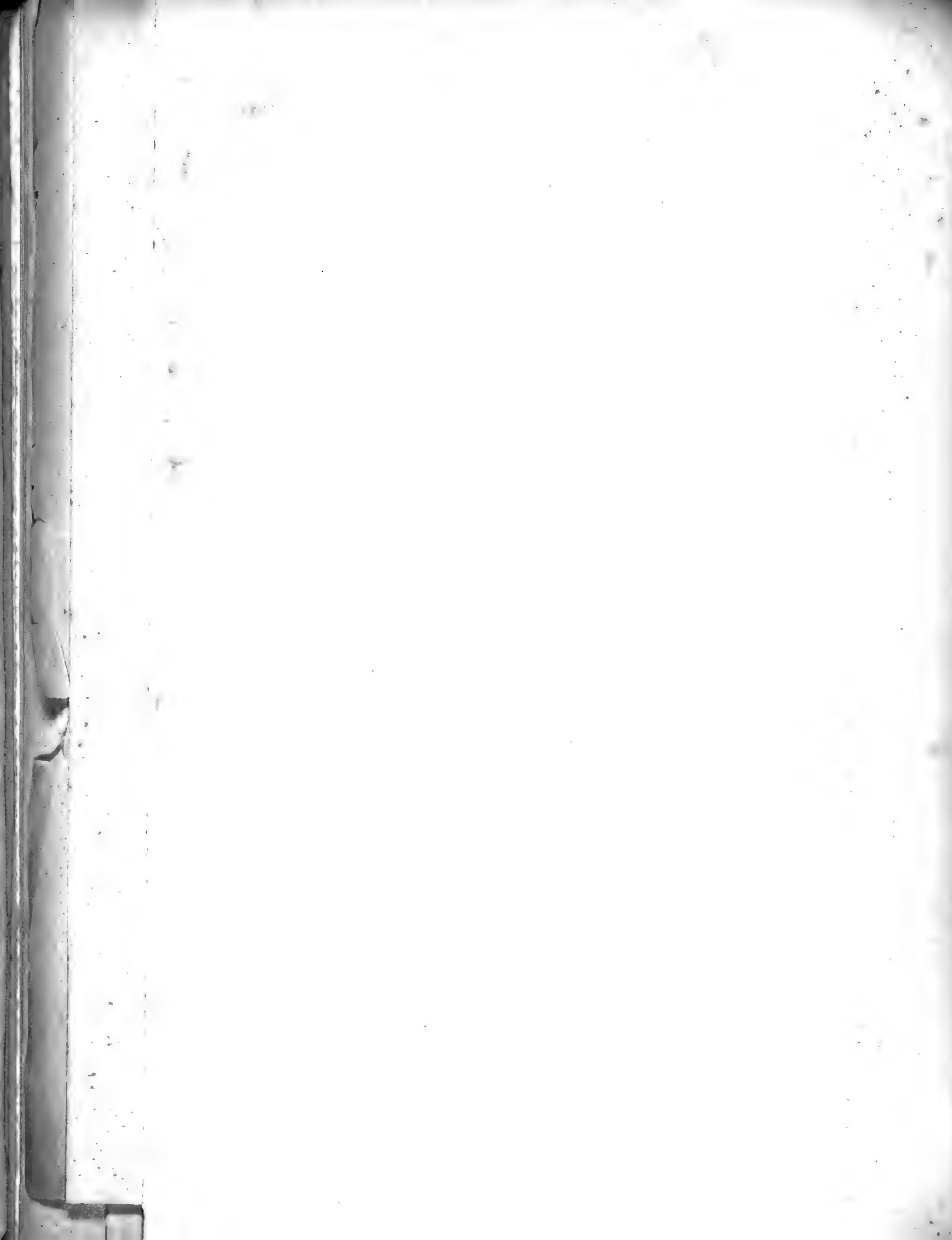
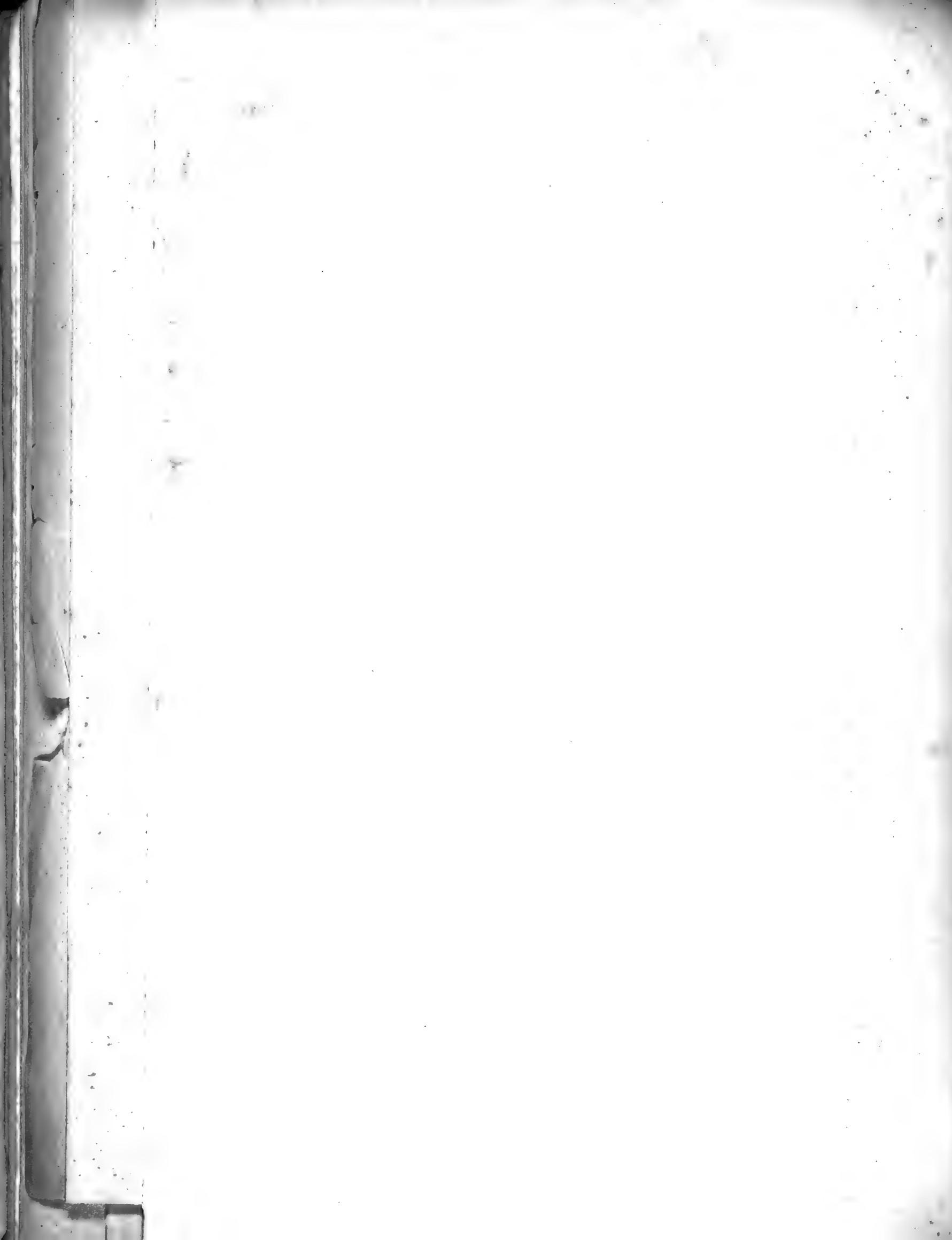


Fig. 2. *Synemus obesus* J. S. Gilmore

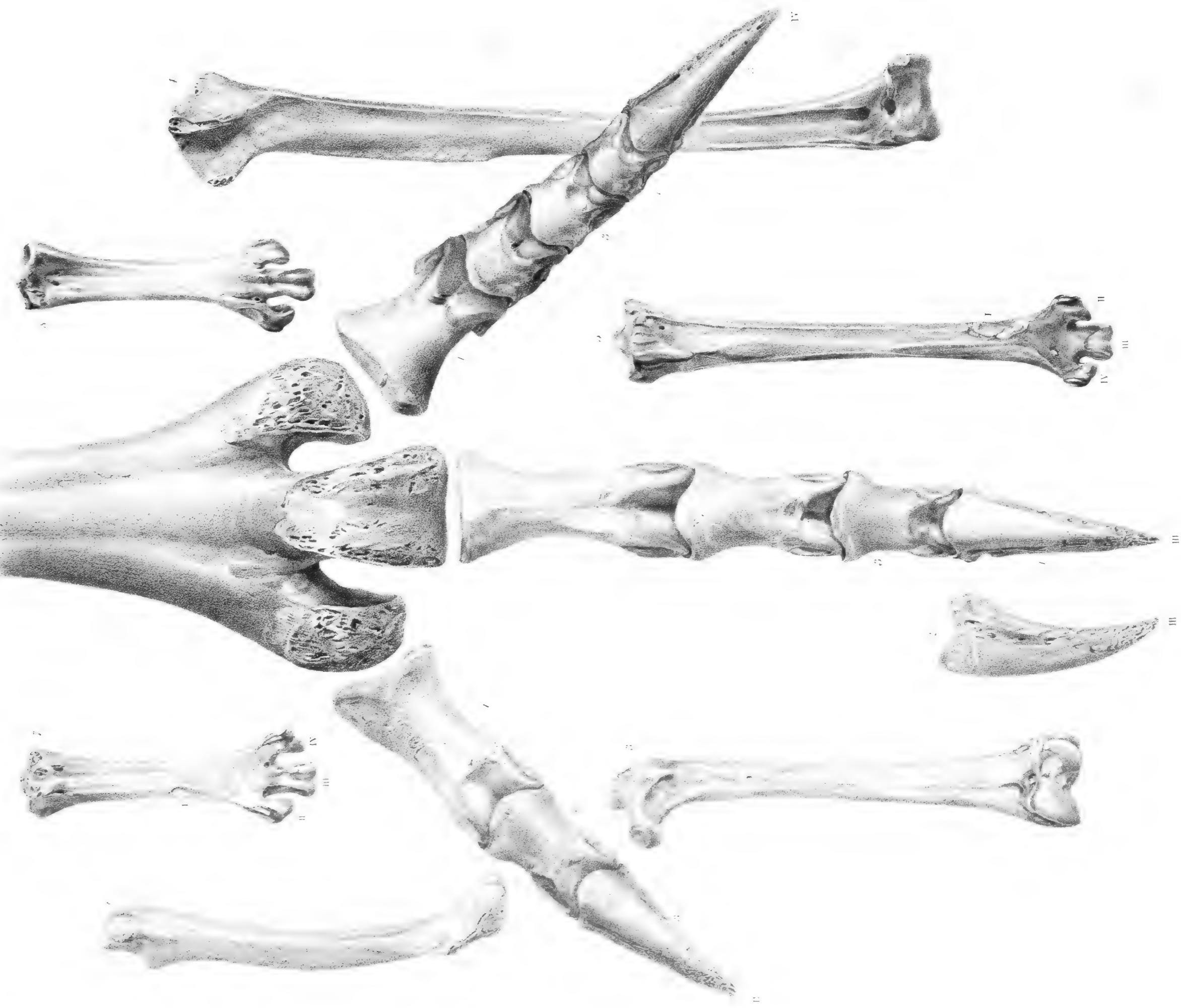


PLL o LLI

1

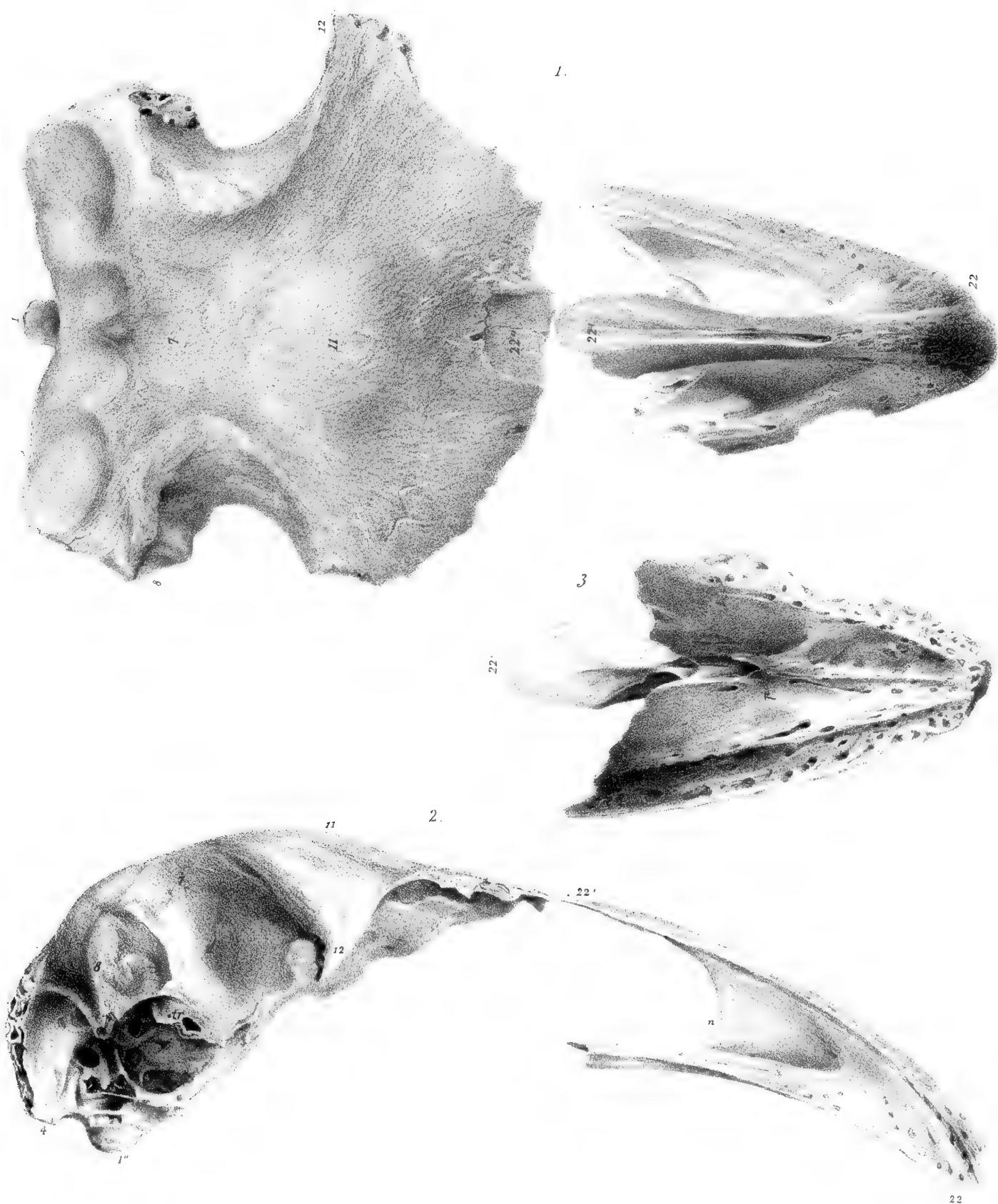


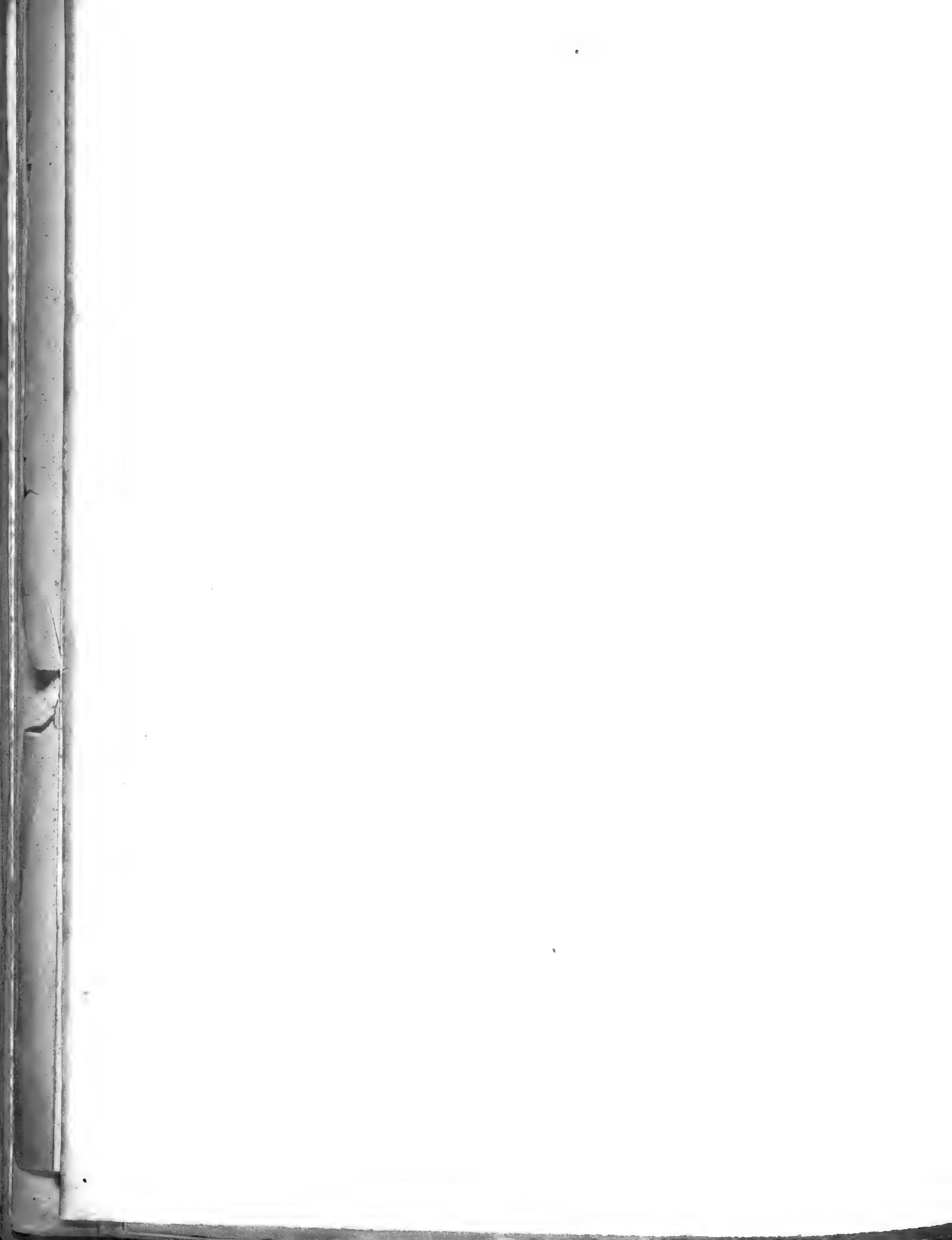
Pl. II.

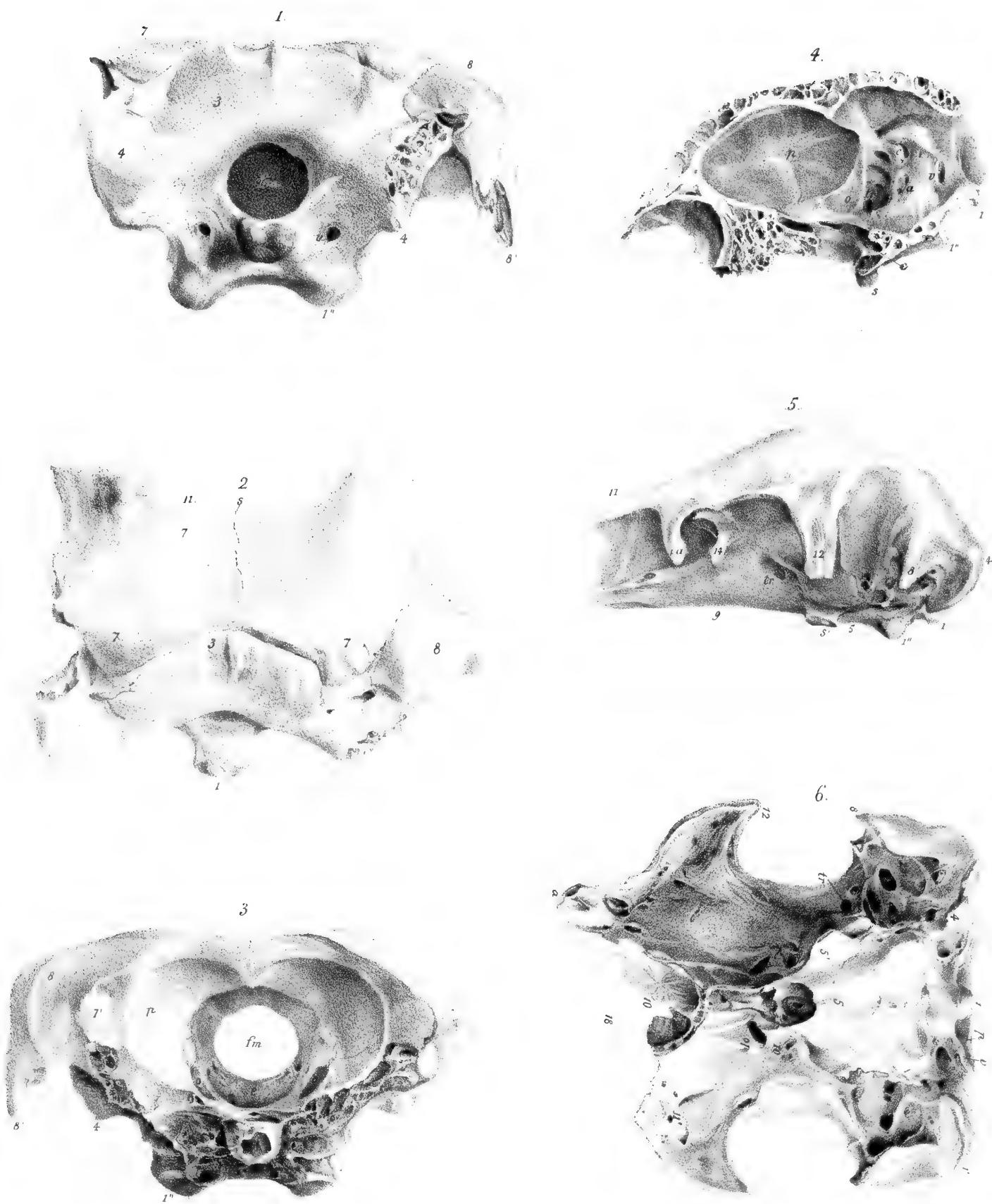


Chalcizopter cimochalcis, Stoliczka, G. S. Geissler.











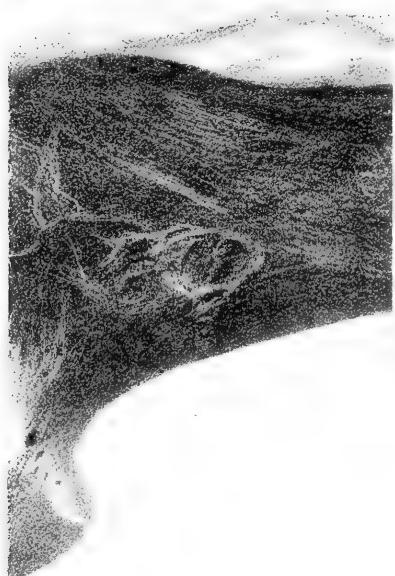
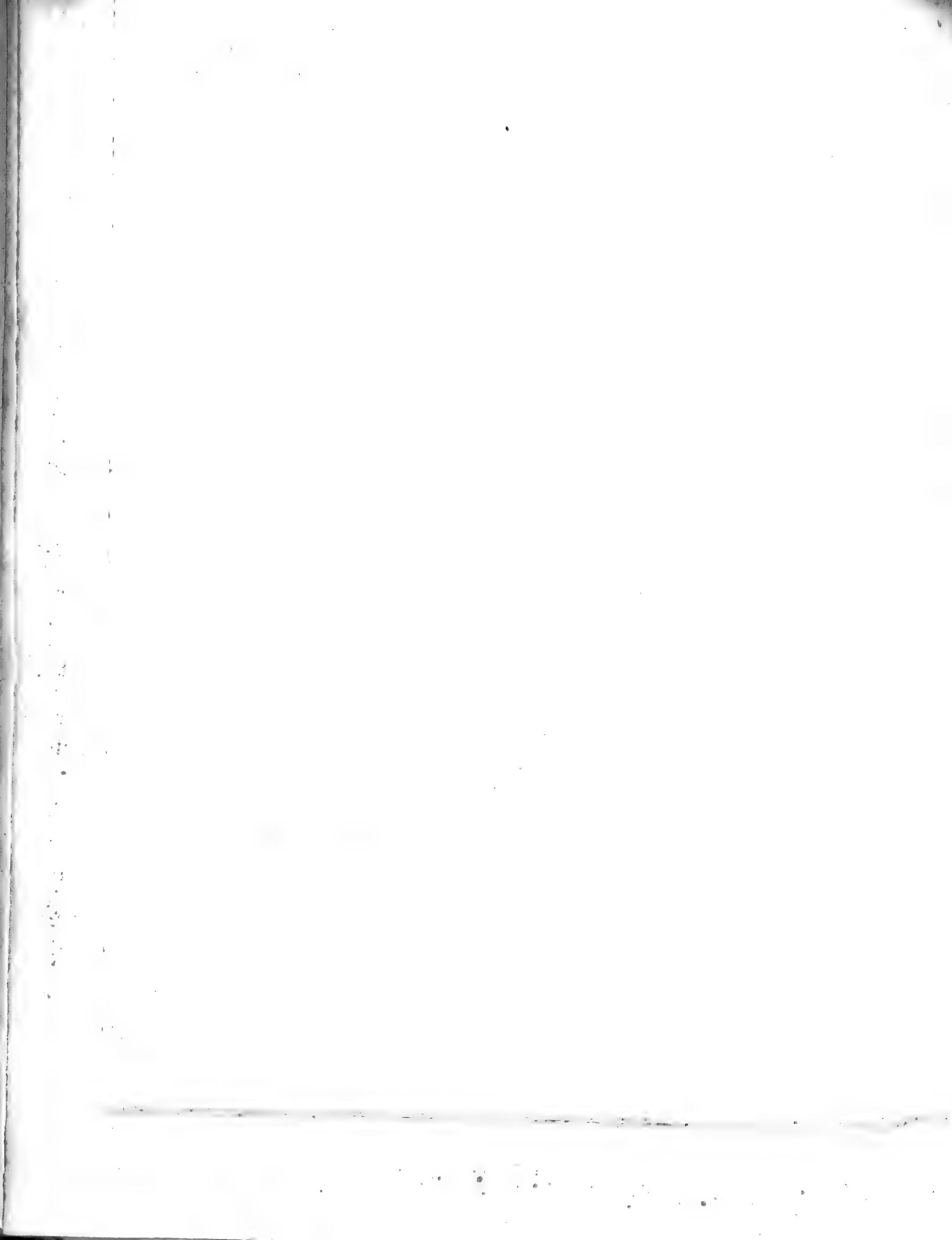
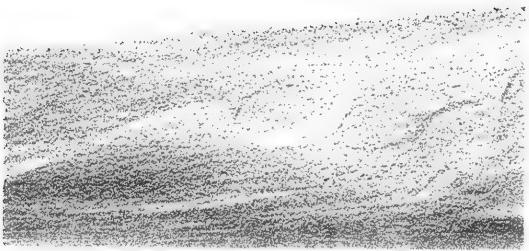






Fig. 1, 2. *G. gracilis*. Fig. 3. *G. struthioideus*.





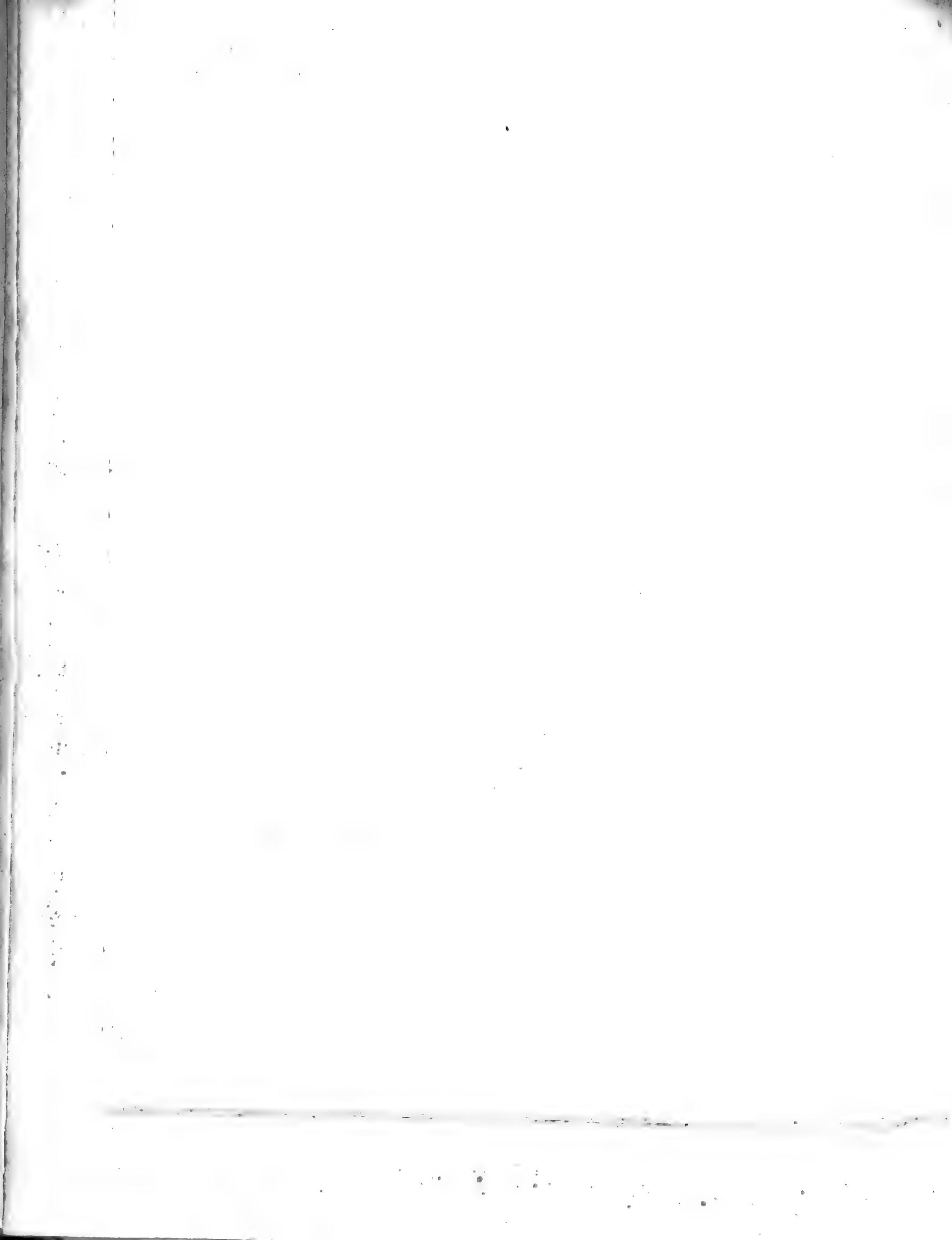
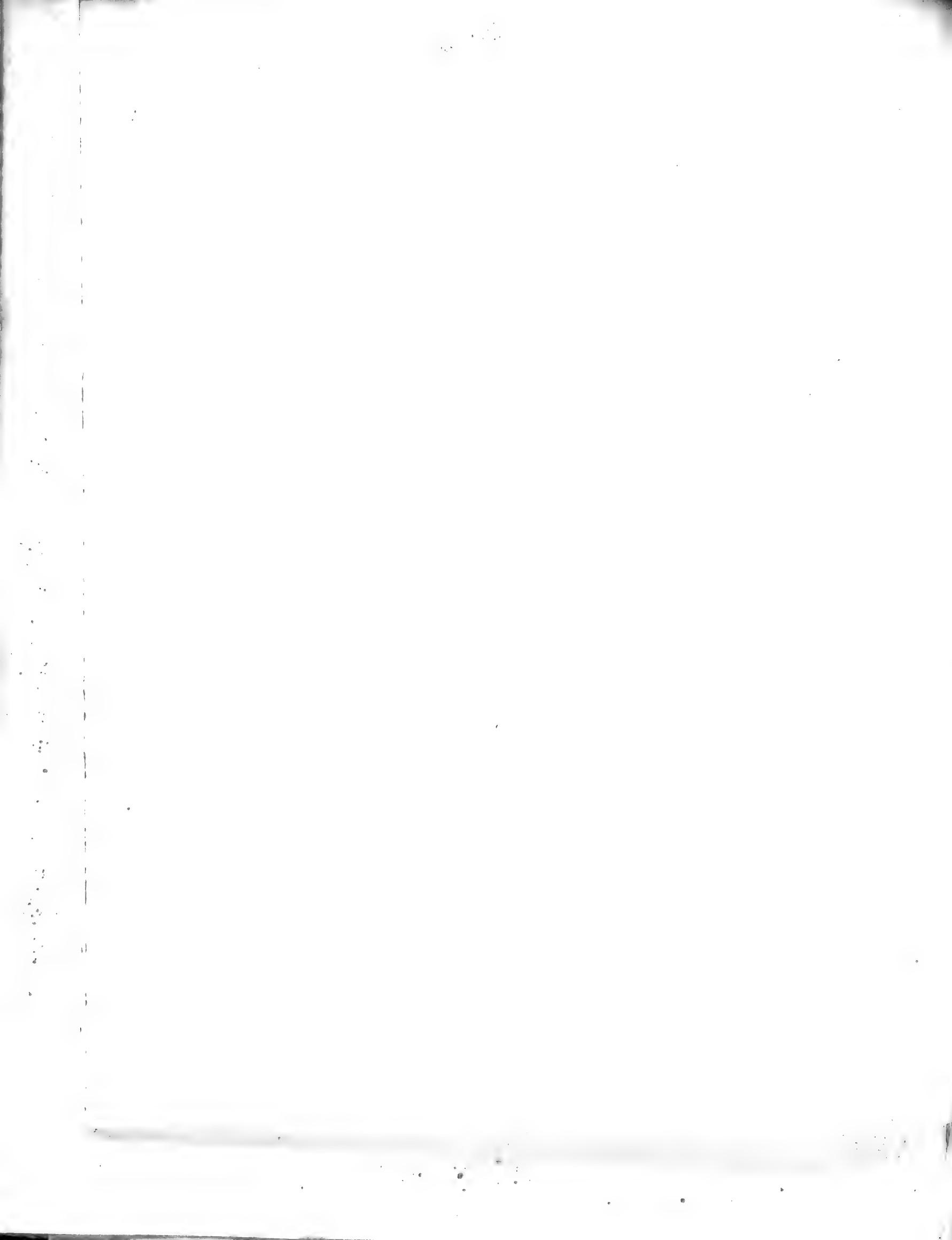
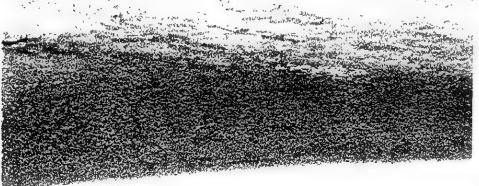
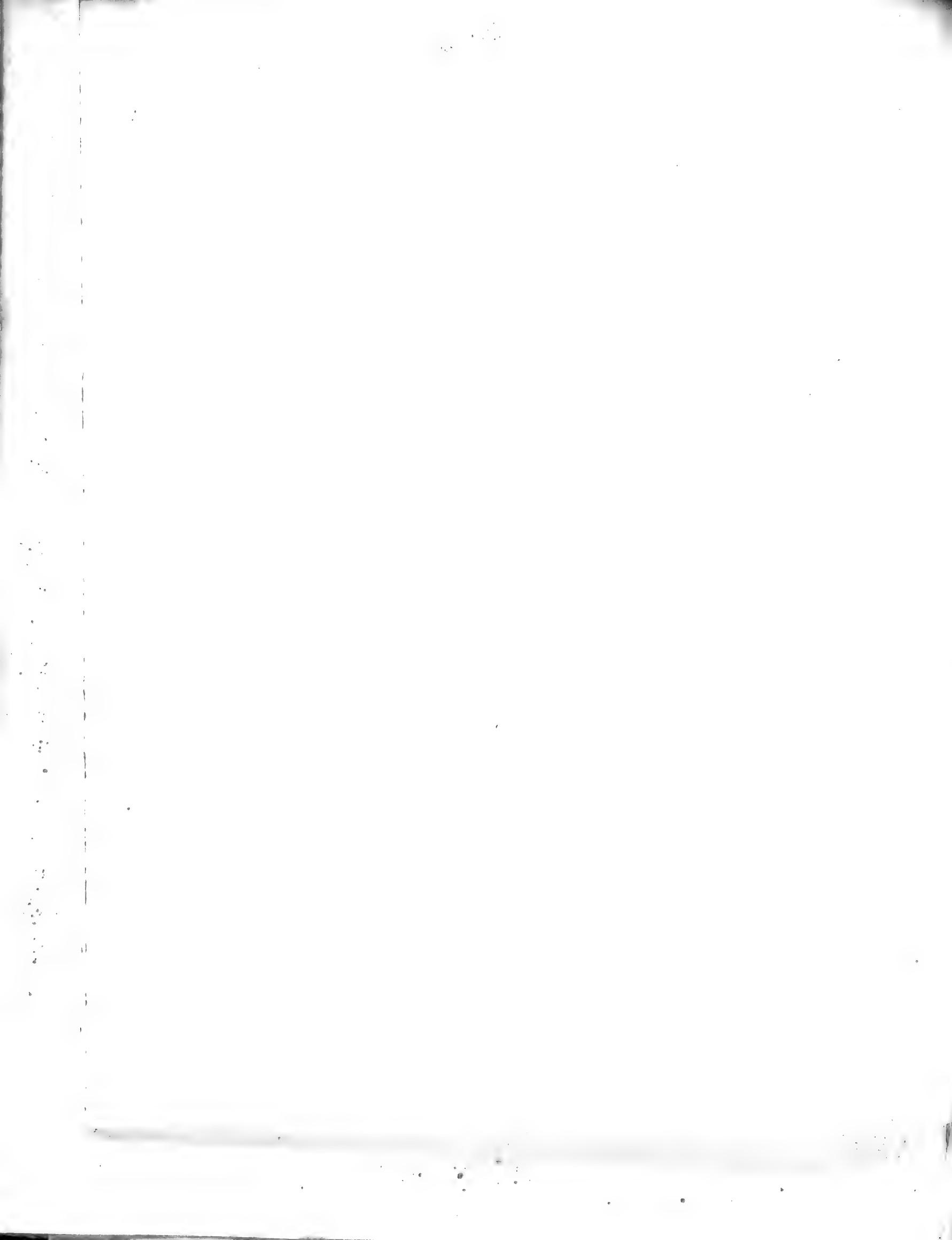




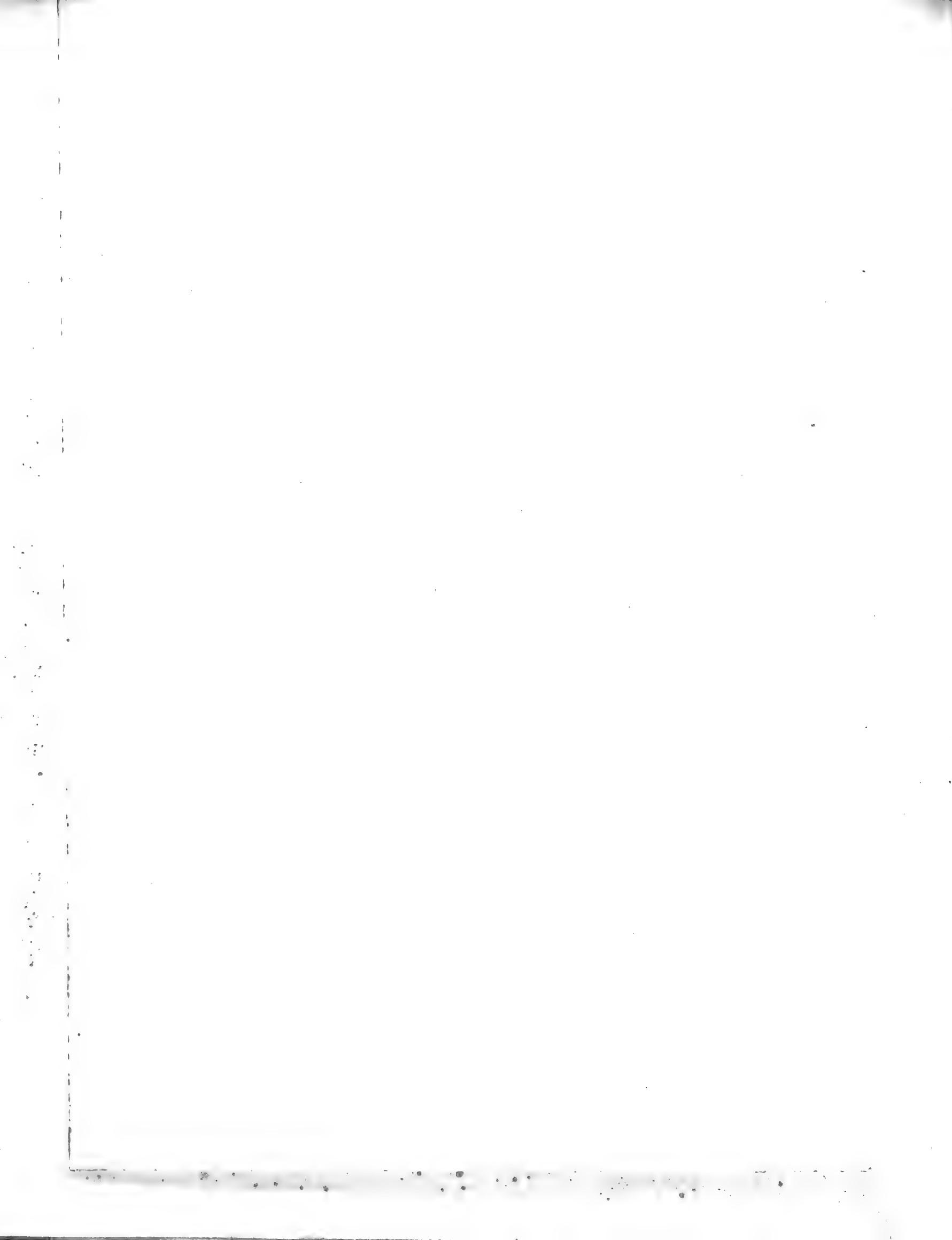
Fig. 1. *Gomphosus granulosus* (Ley). (*Gomphosus melanostomus*)



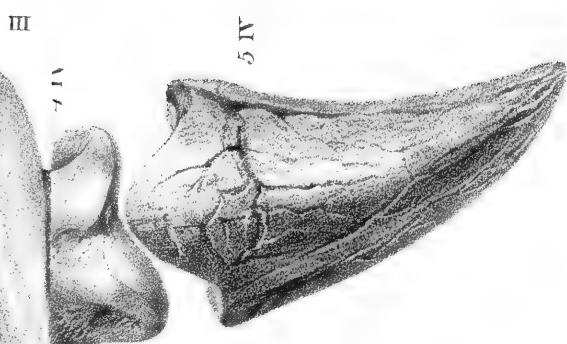
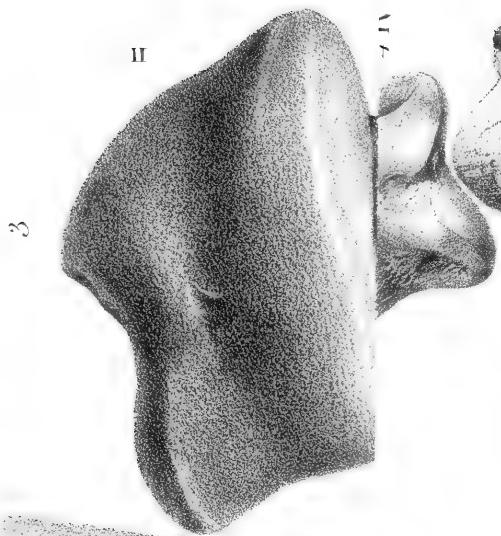
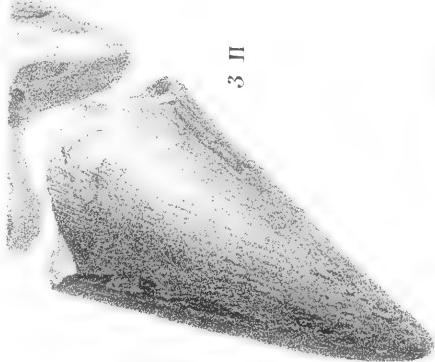
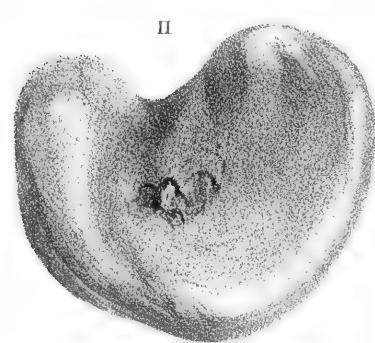








Sinomys elephantinus.

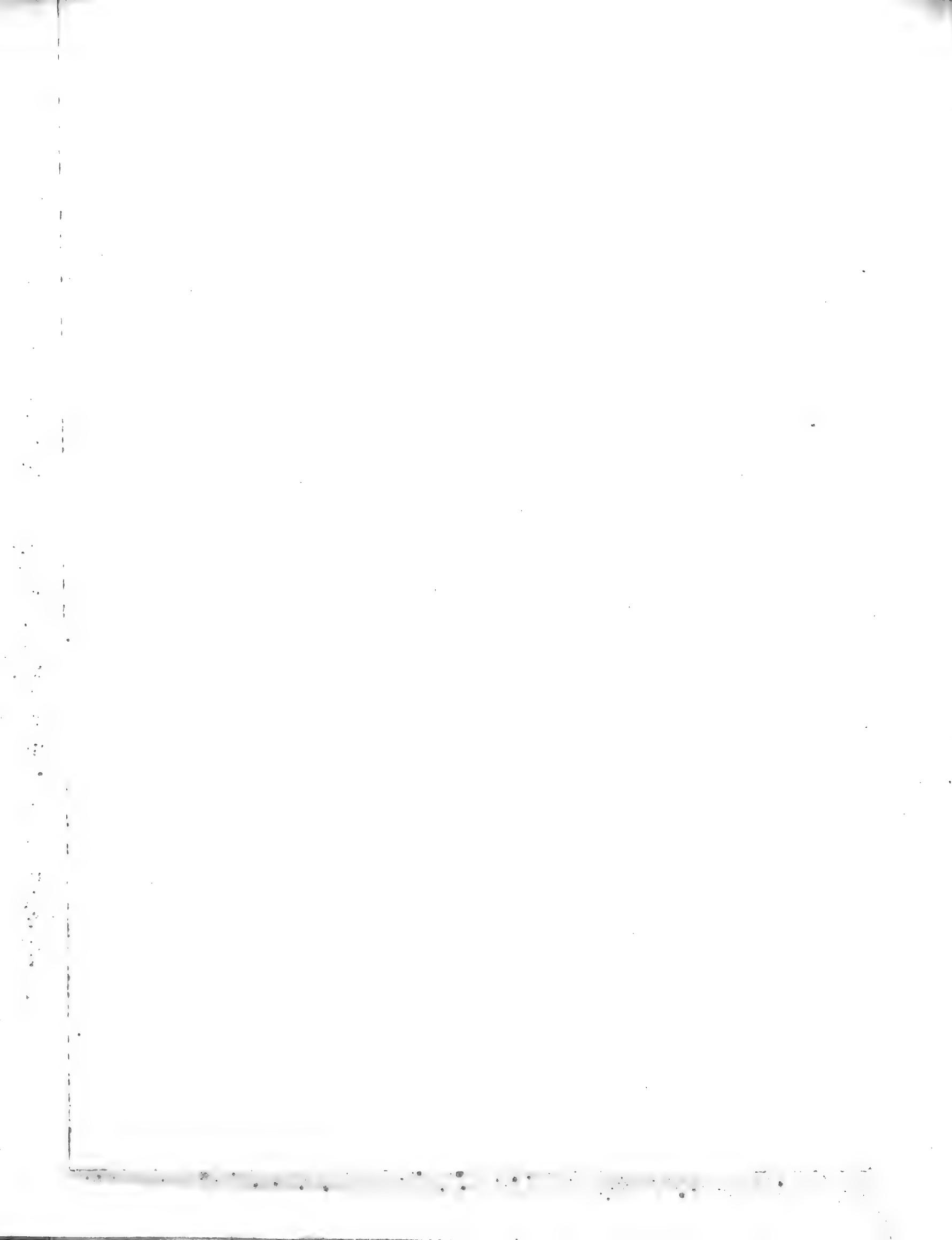


2 III

3 III

4 III





Sinurus elephantinus

Pl. II, Fig. II





Fig. 2.

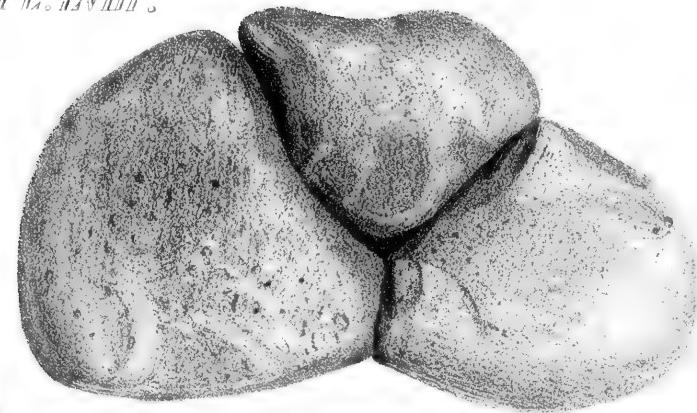


Fig. 1.

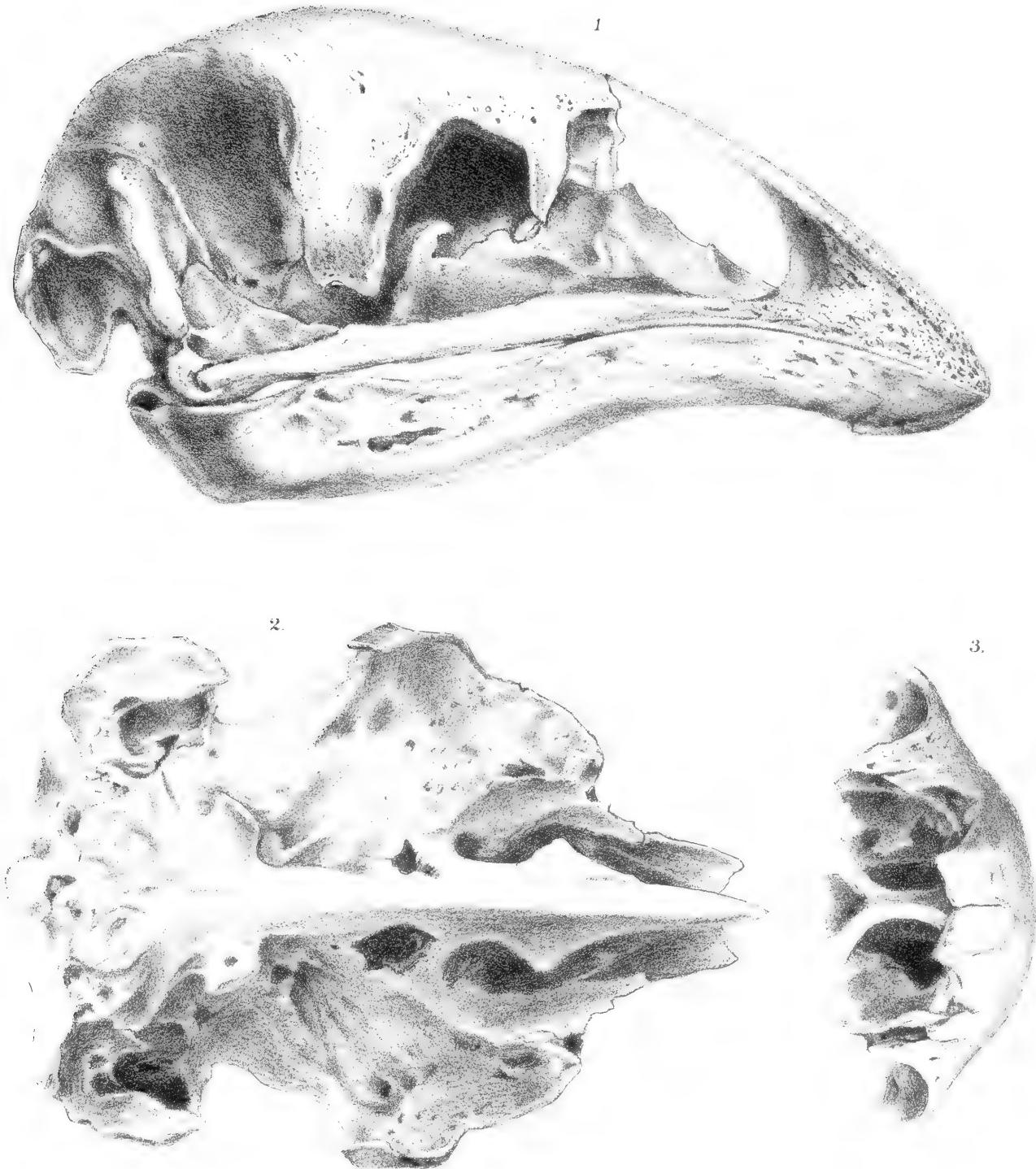
From Nature on Stone by E. Belben.

Drey & Son, Litho. The 1.

Fig. 1. *Dinornis elephantopus*, juv. - 2. *Dinornis crassus* juv.

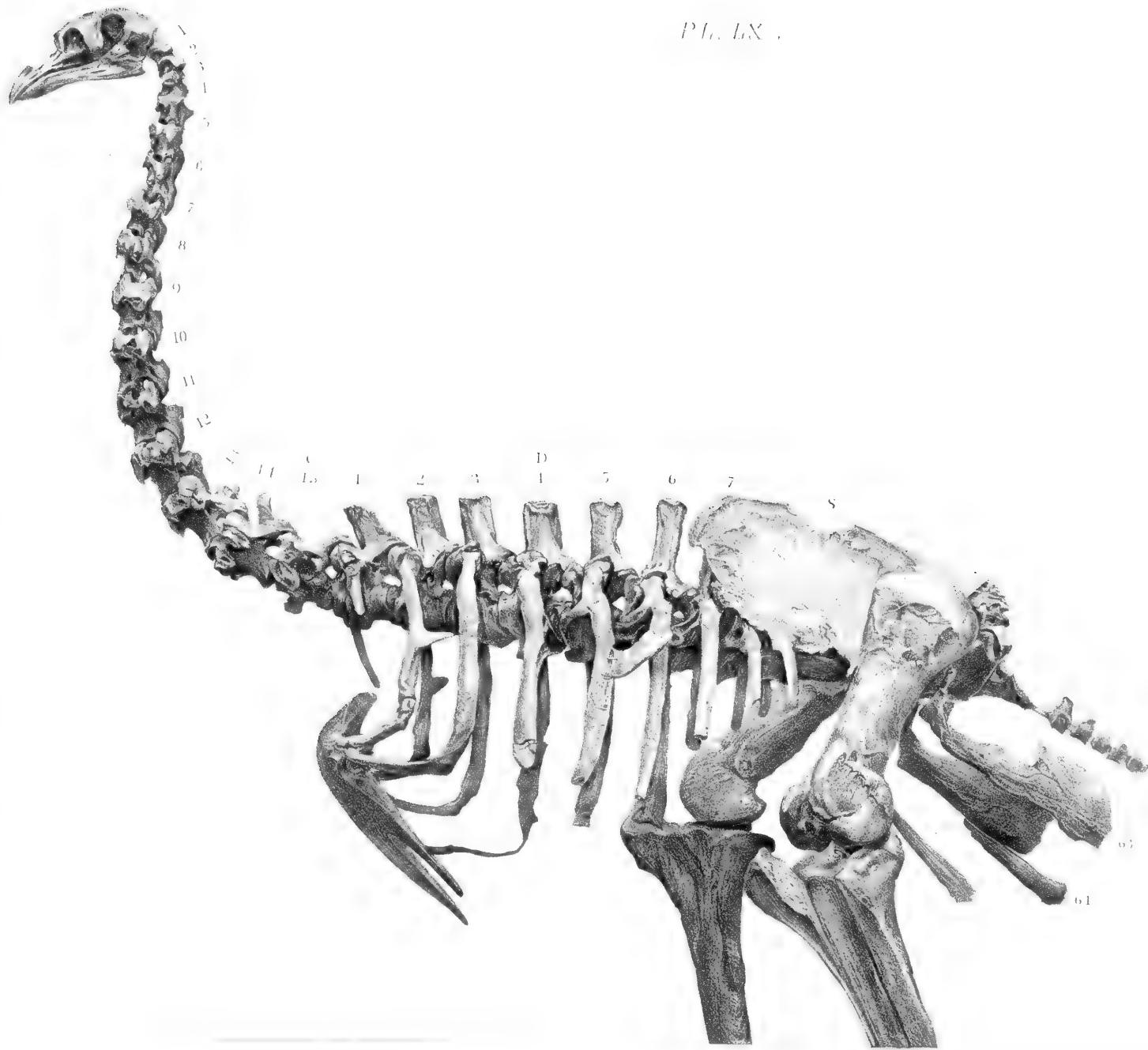


PL. LIX.

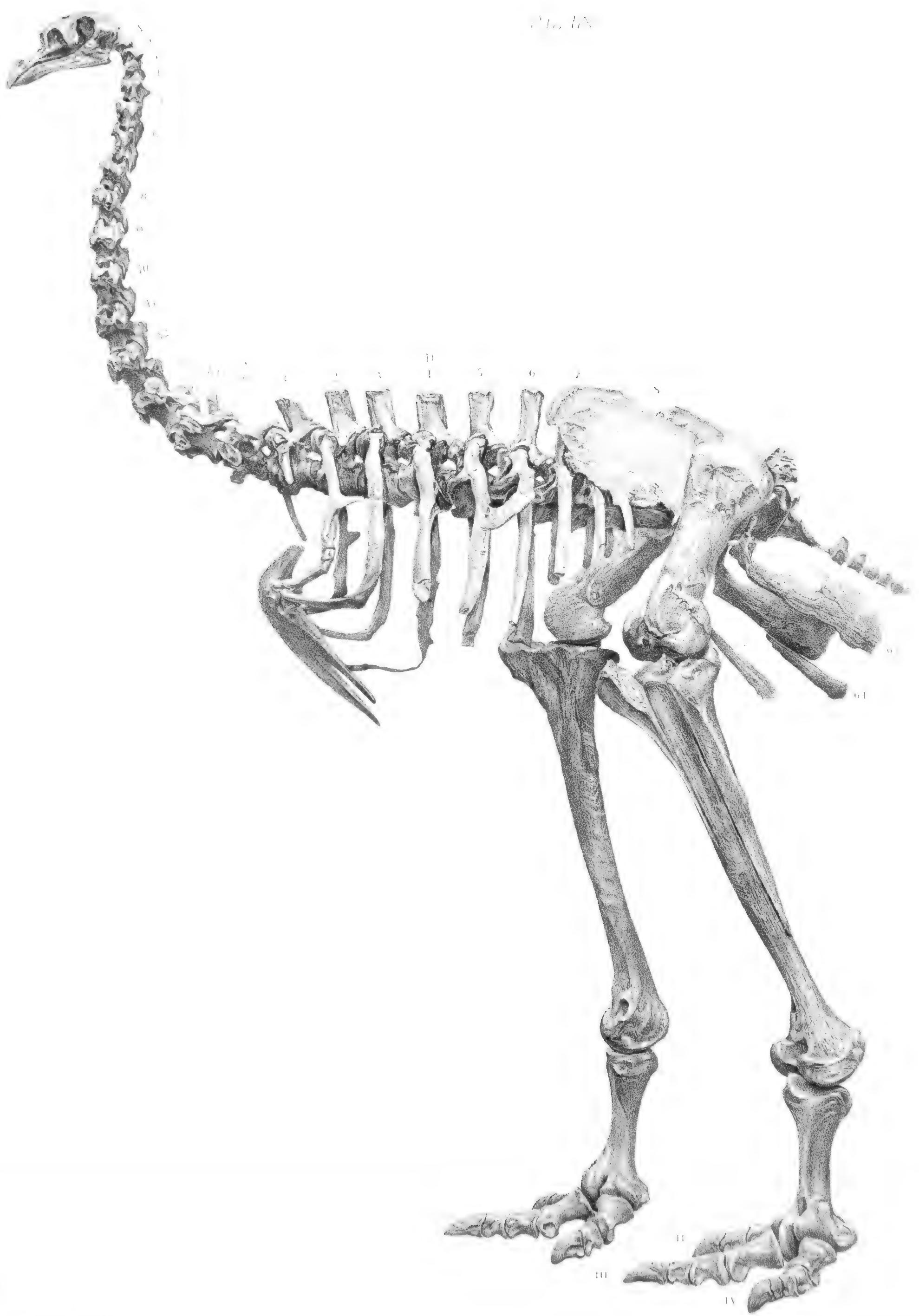


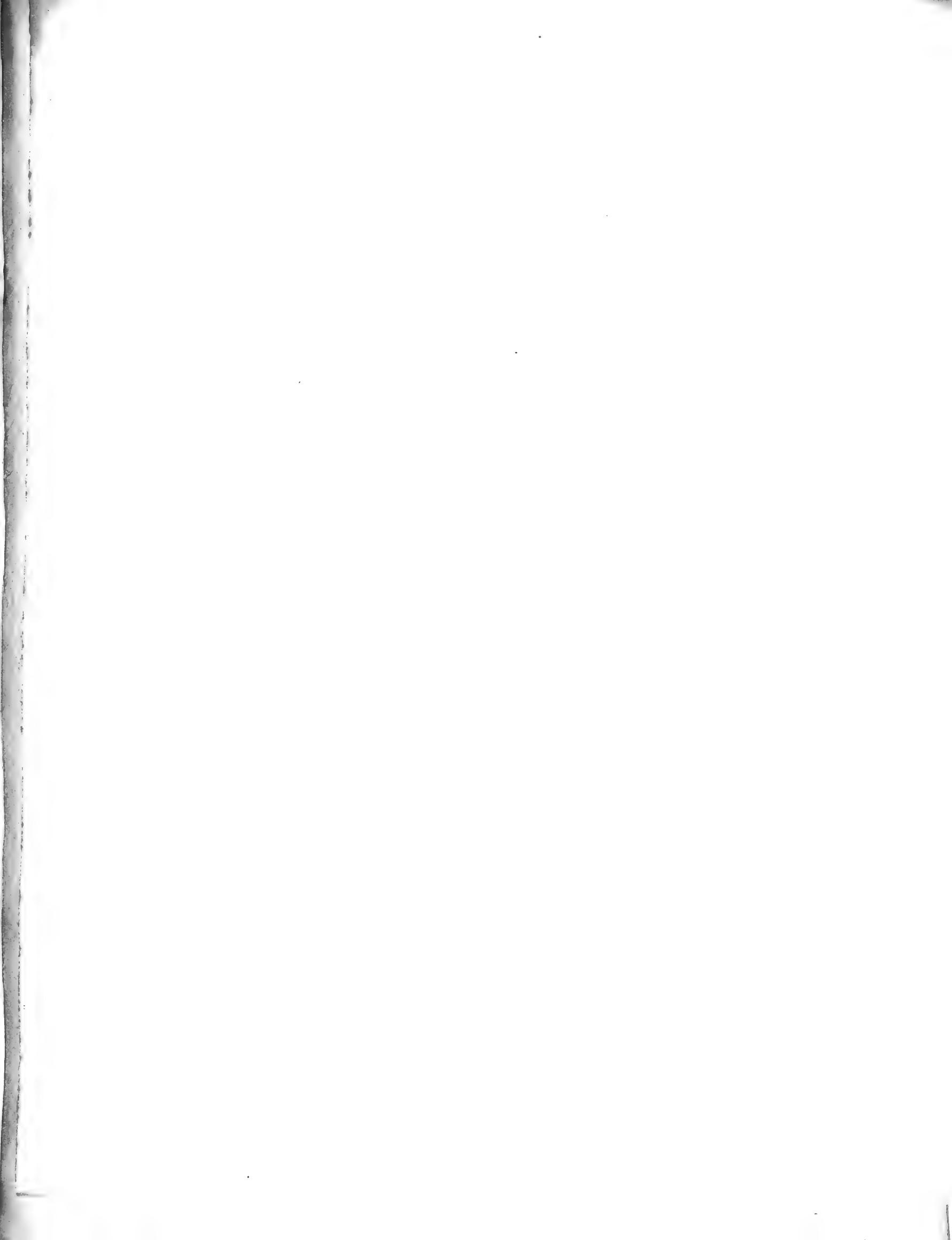


Pl. LX.

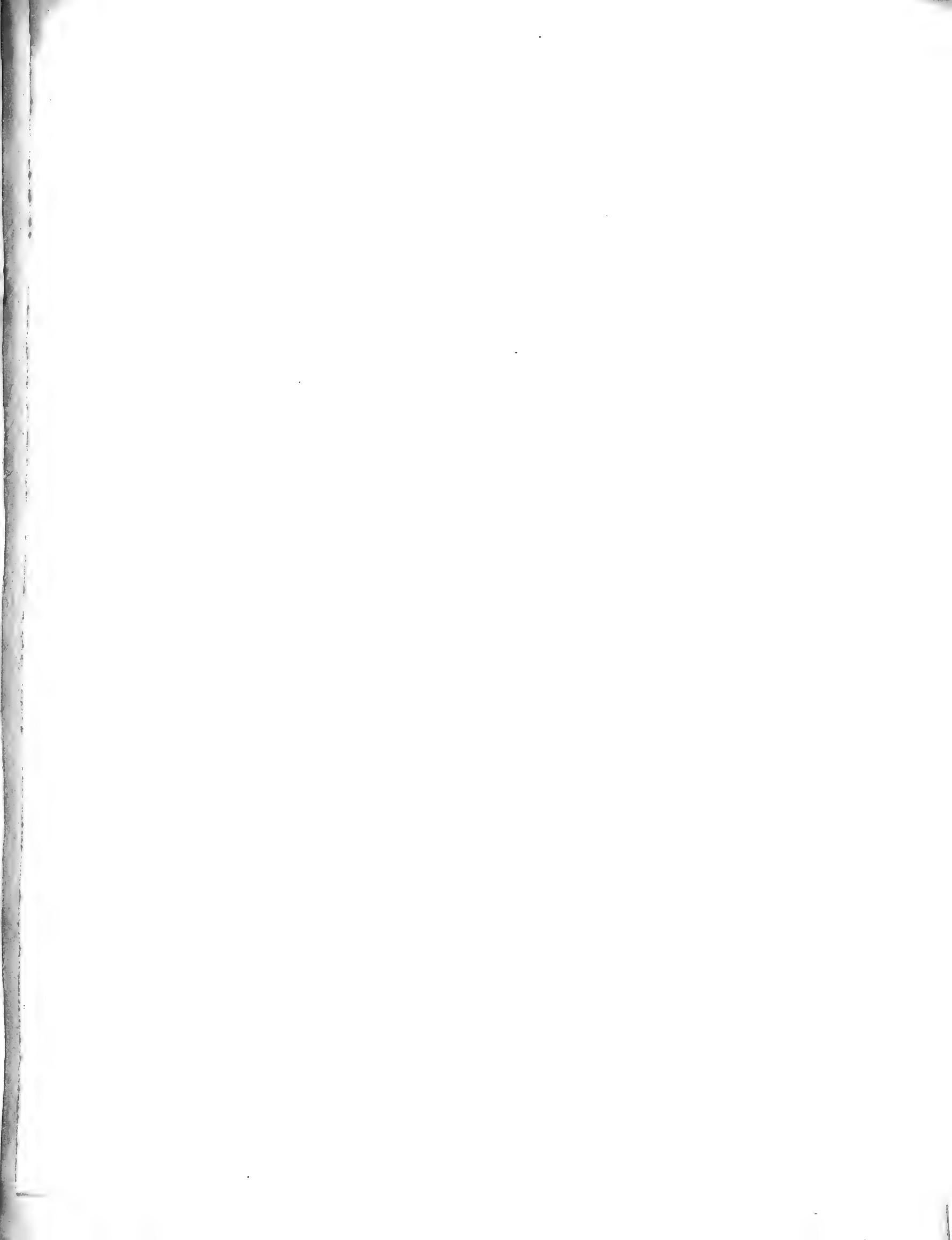












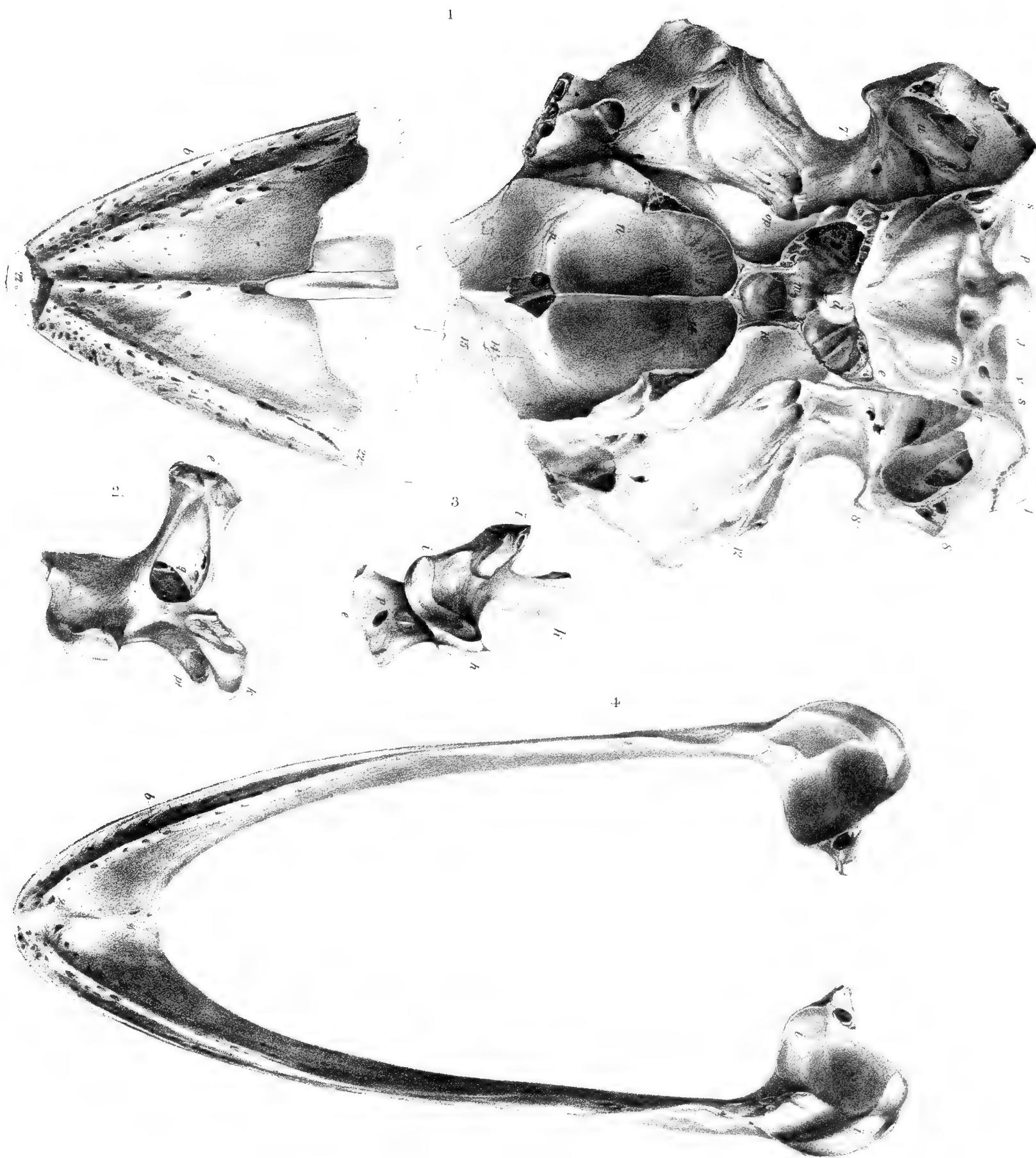
Pl. LXII.







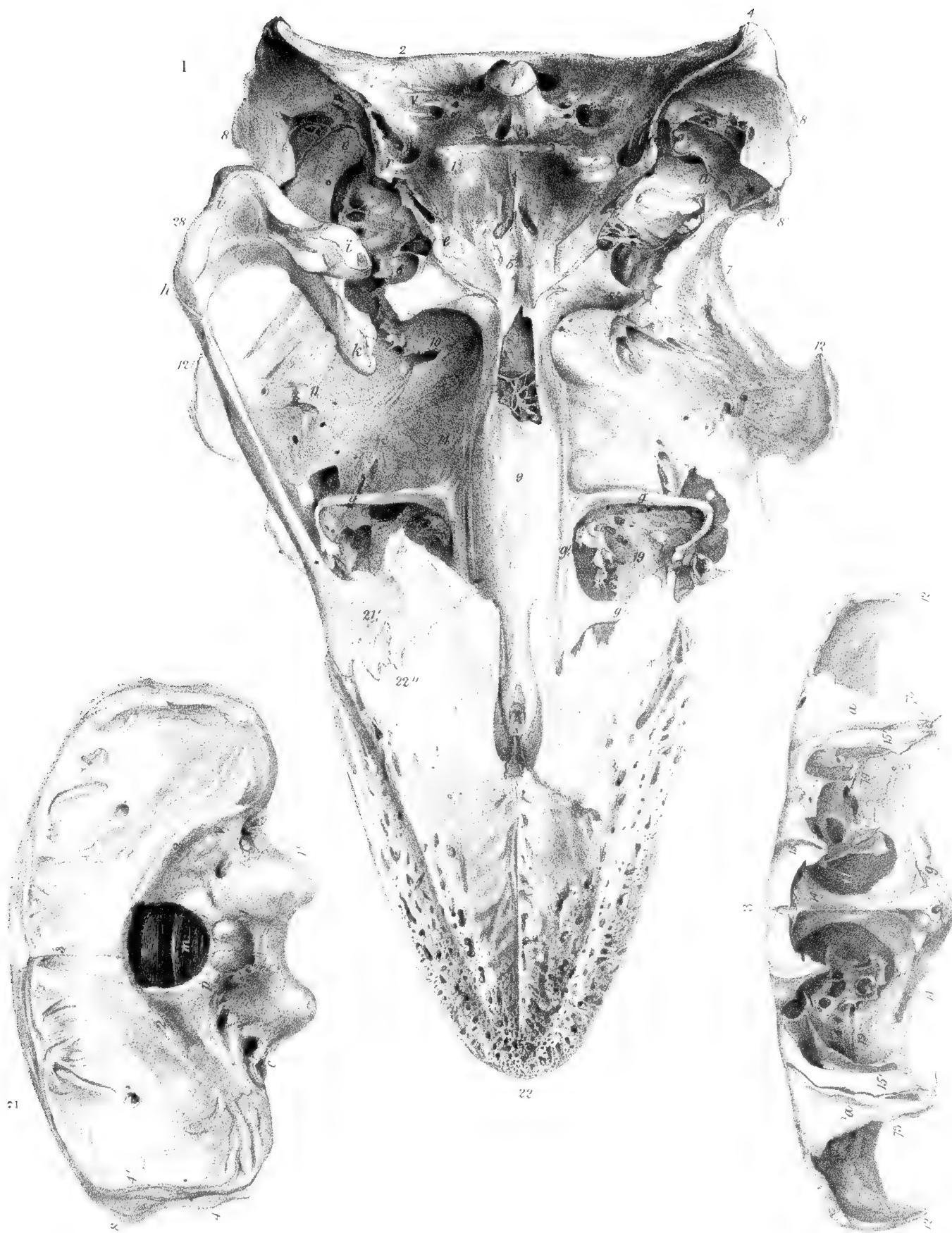












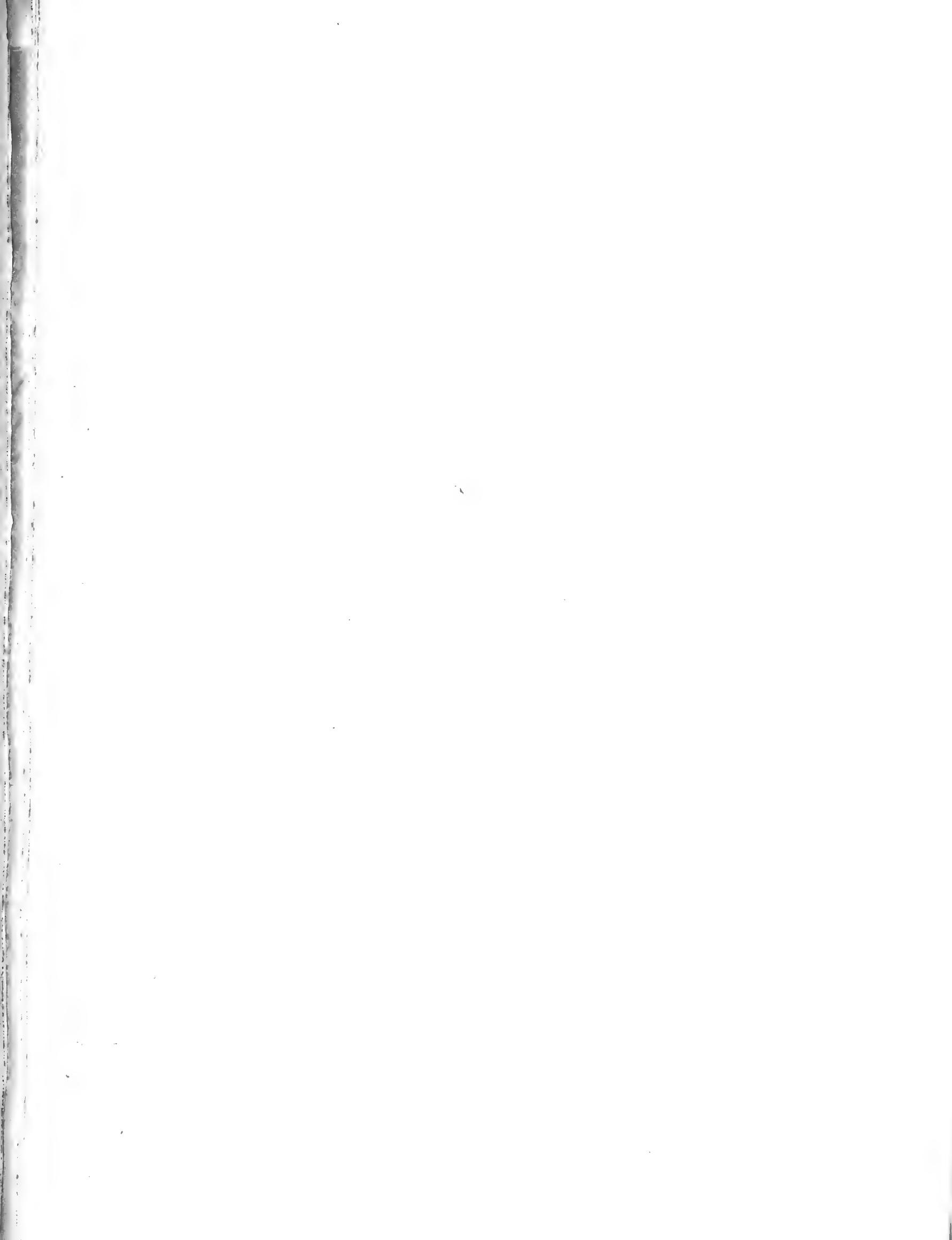
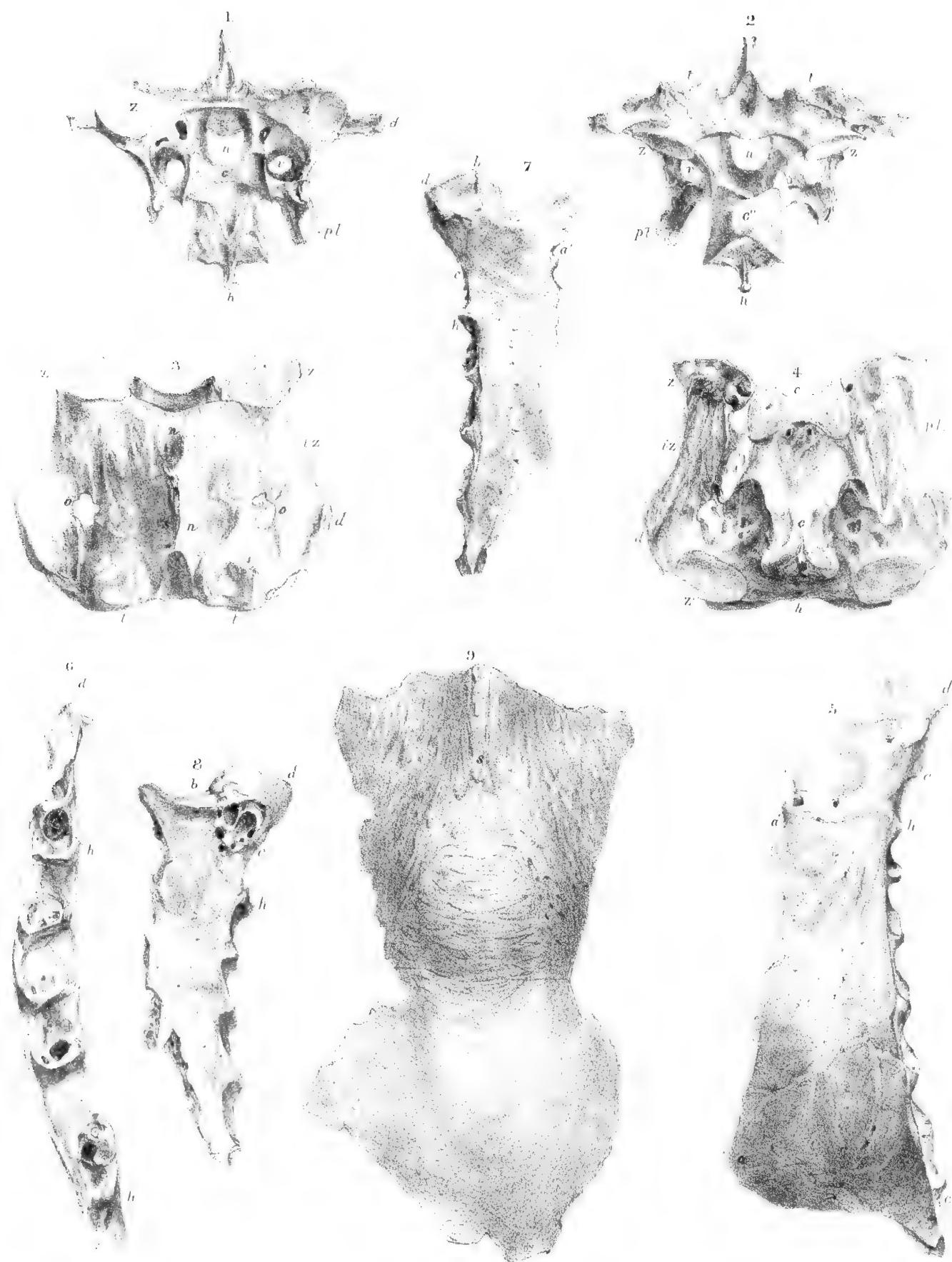
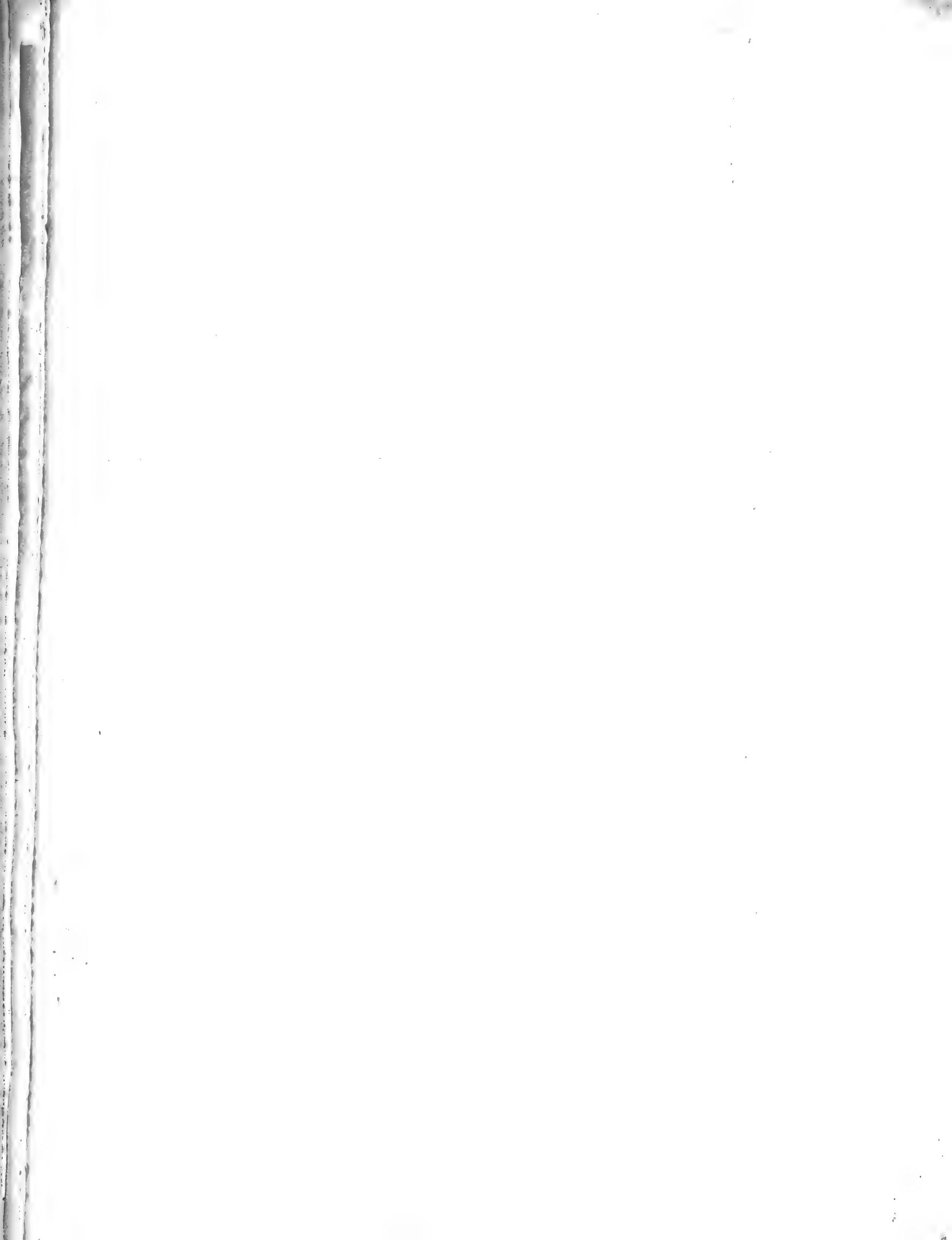
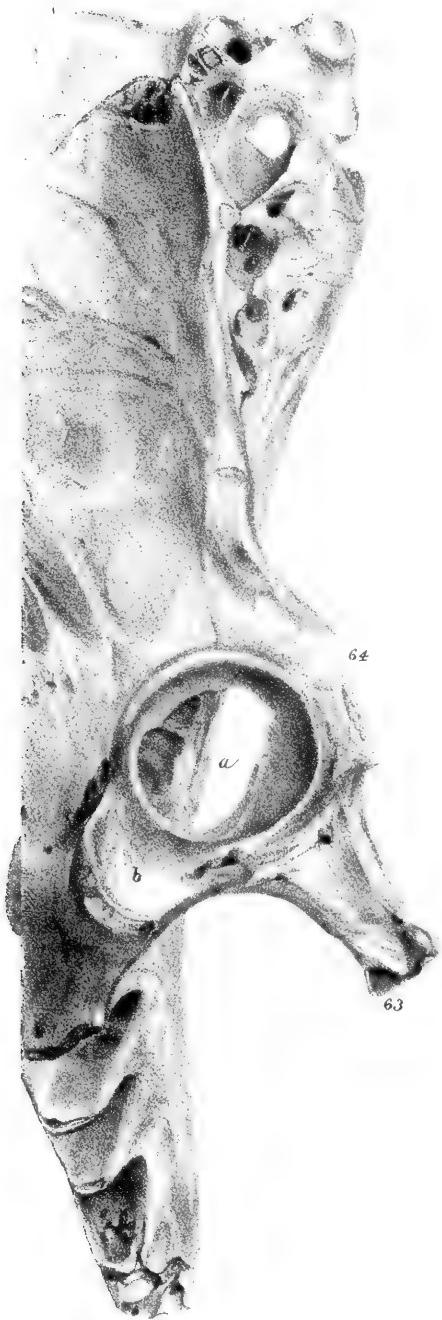
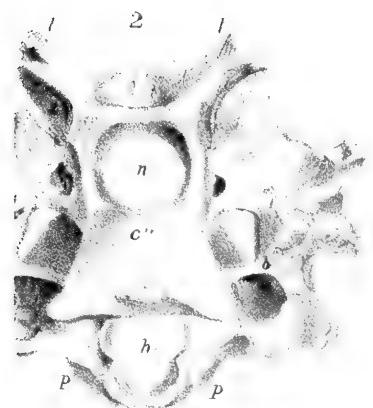
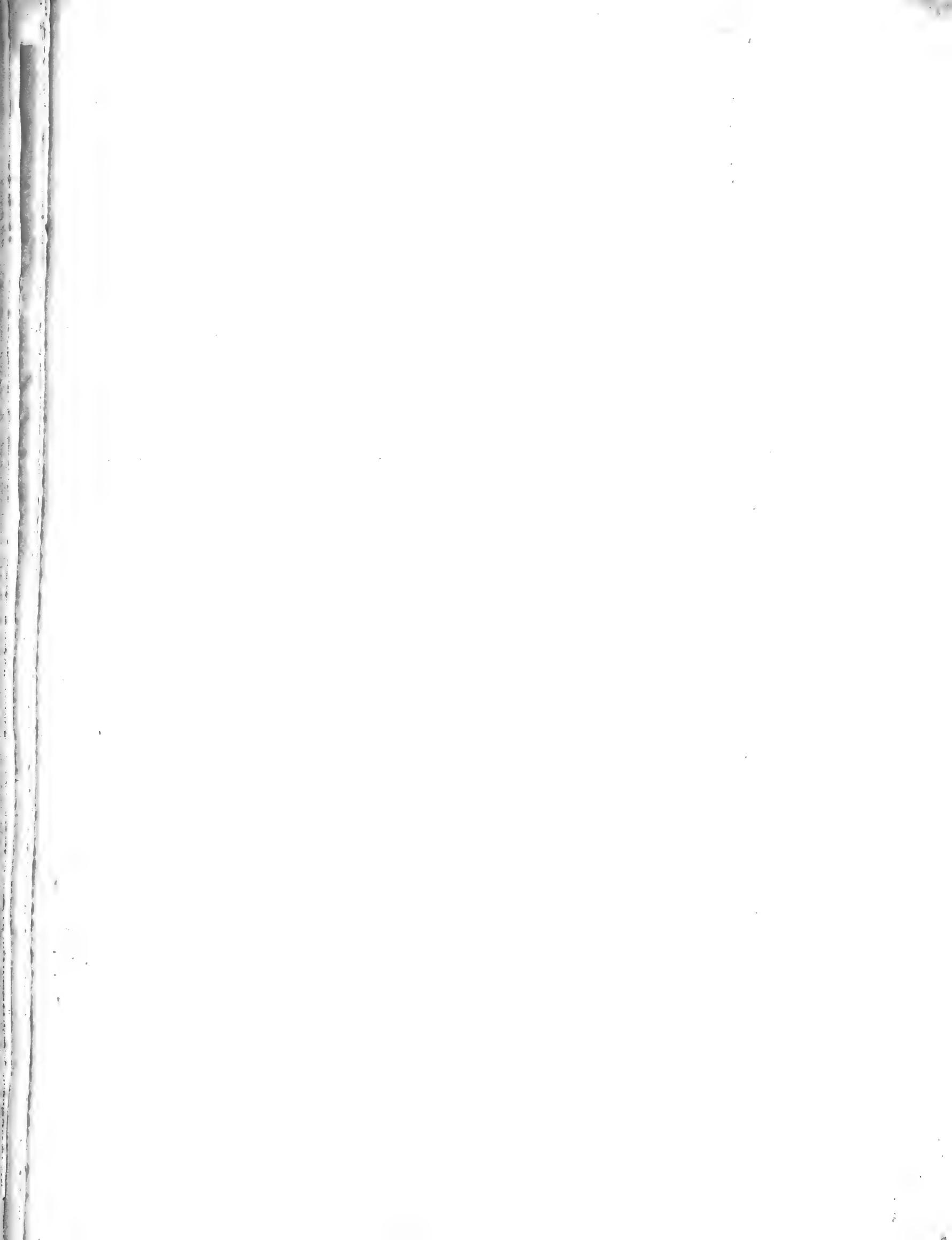


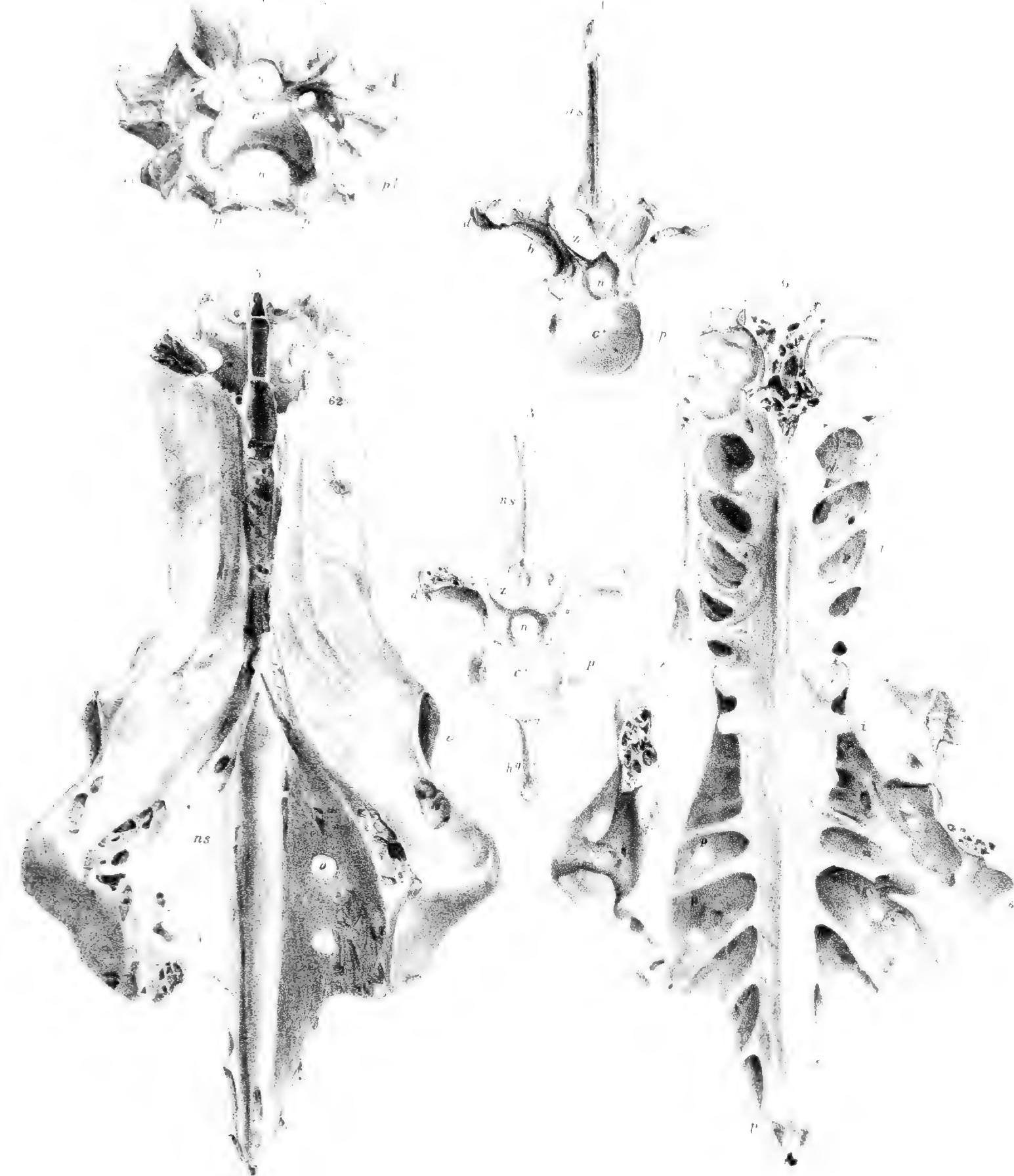
PLATE . LVI .

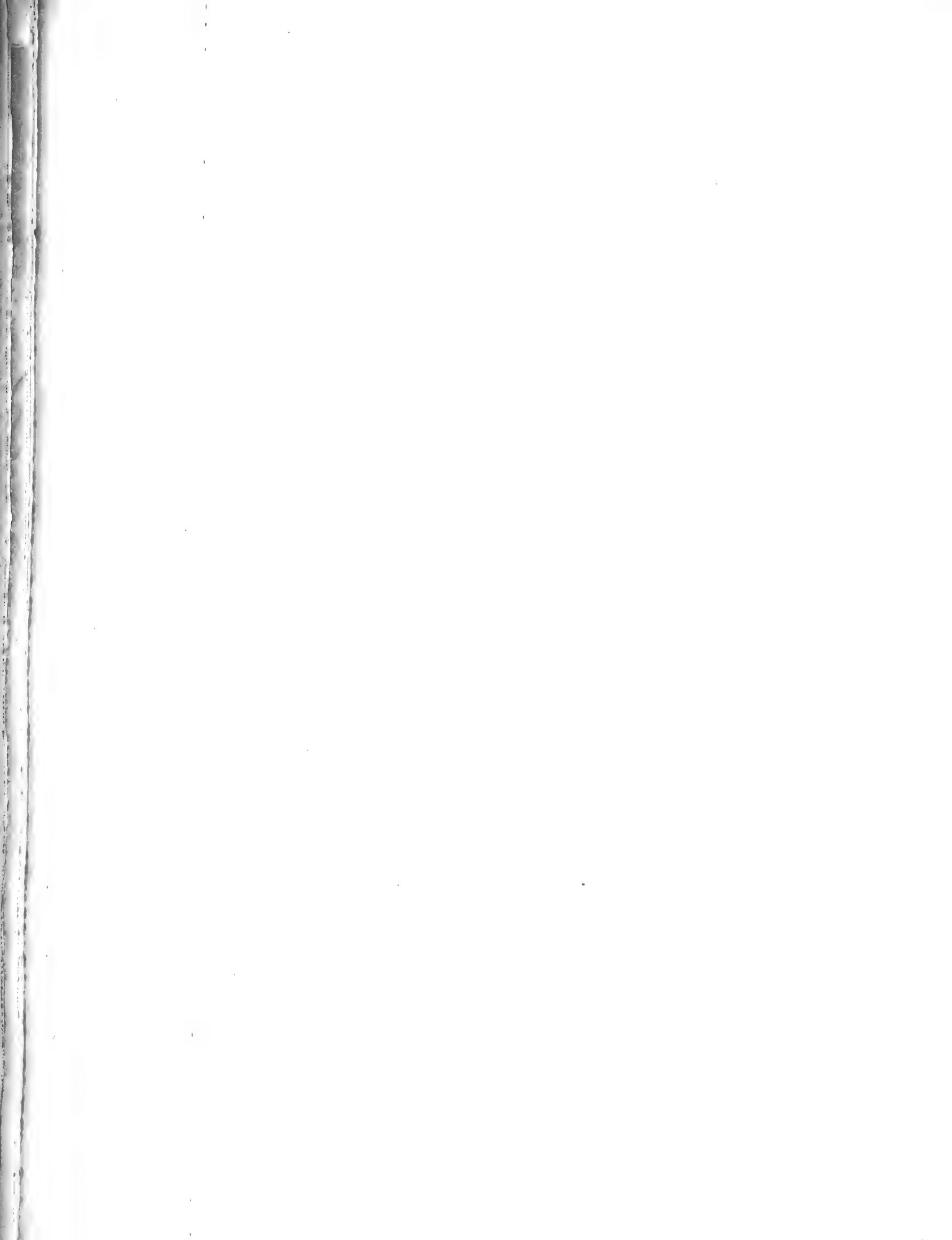


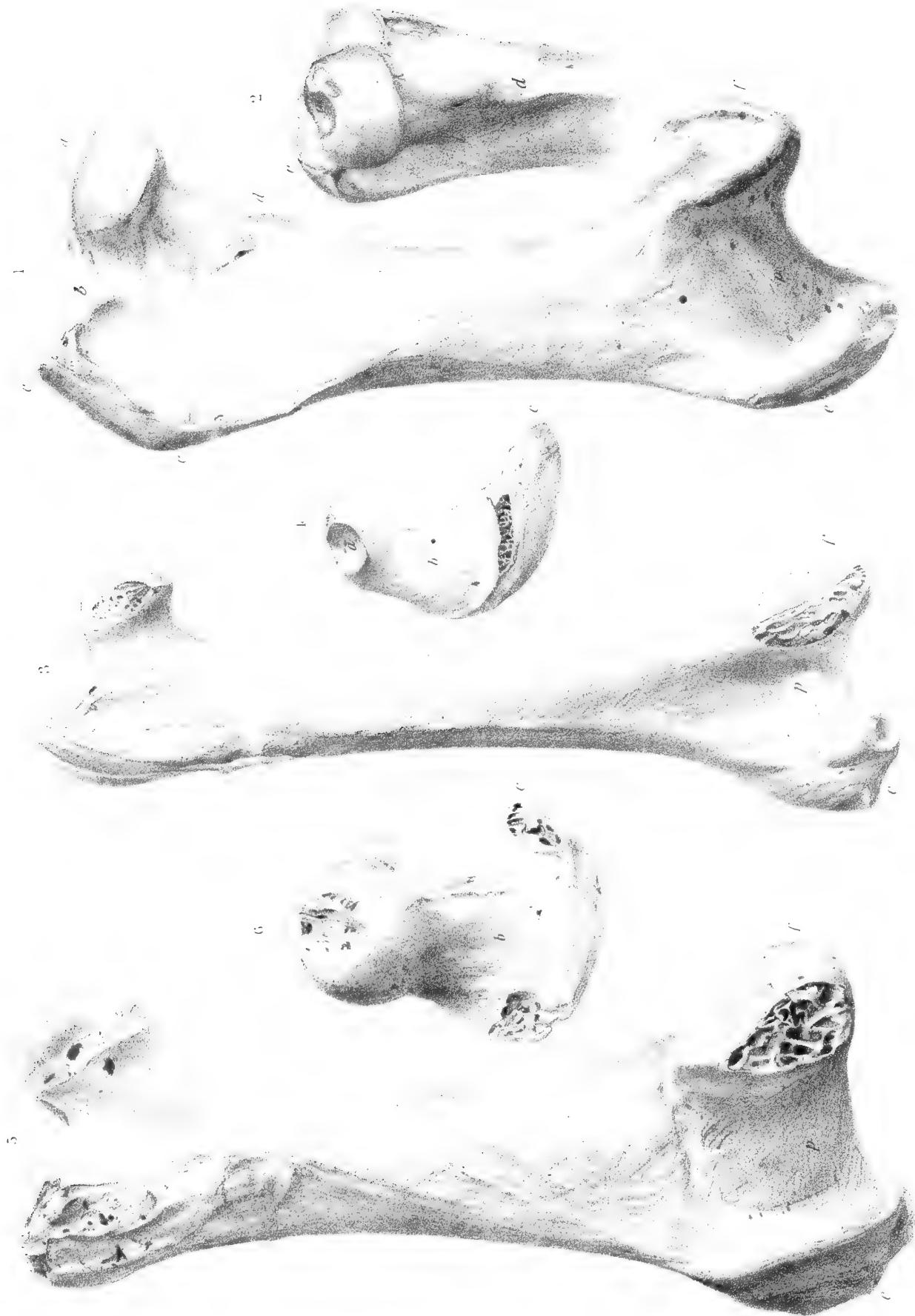










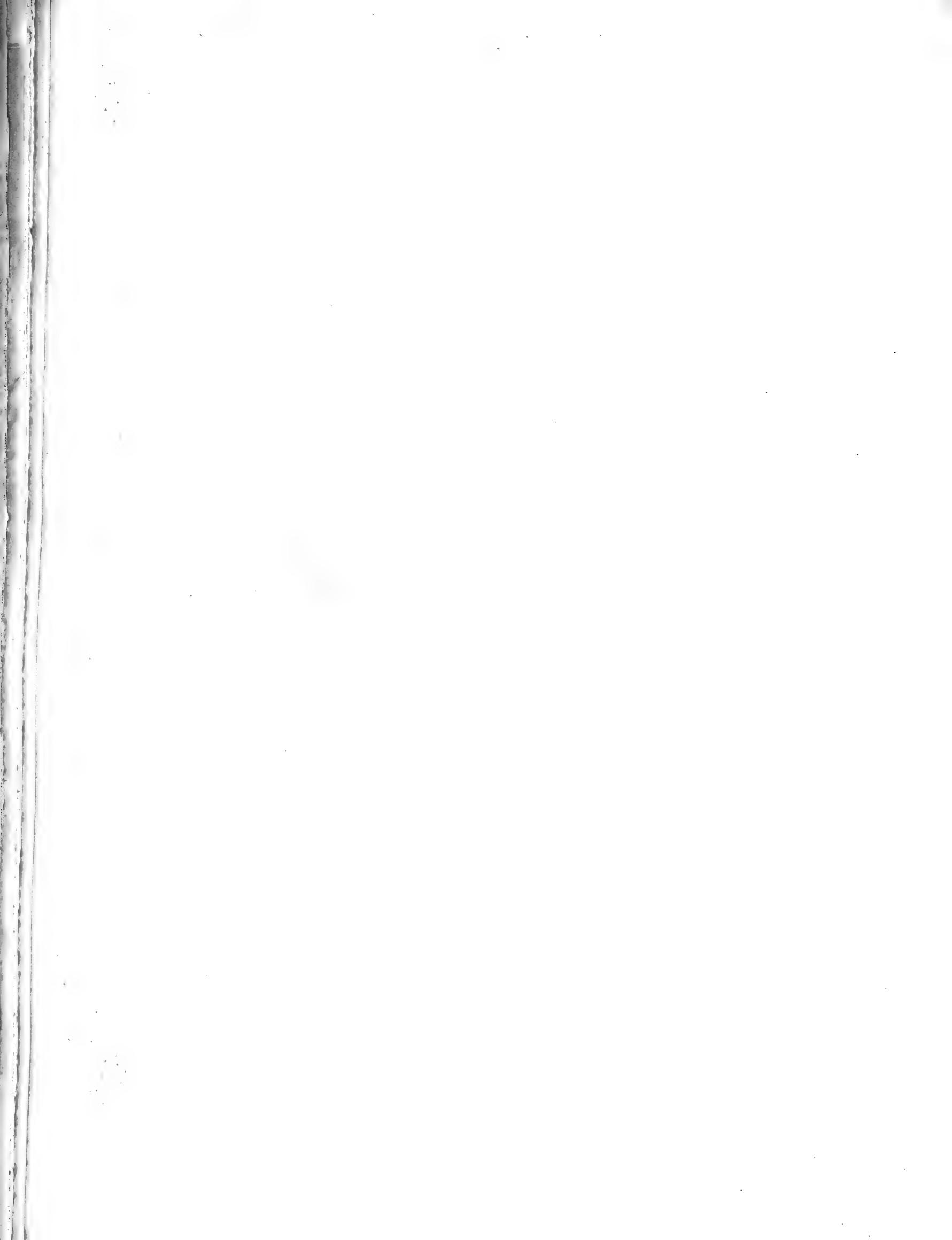


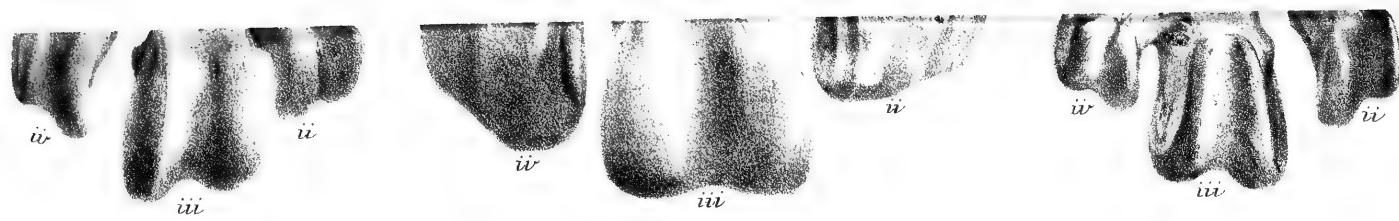
From Naturalist, Vol. IV, Pl. XXVII.

1. 2. CENOMORPHUS 3. C. INTERMEDIUS

CHERANODON

By G. S. Sowerby, F. R. S.

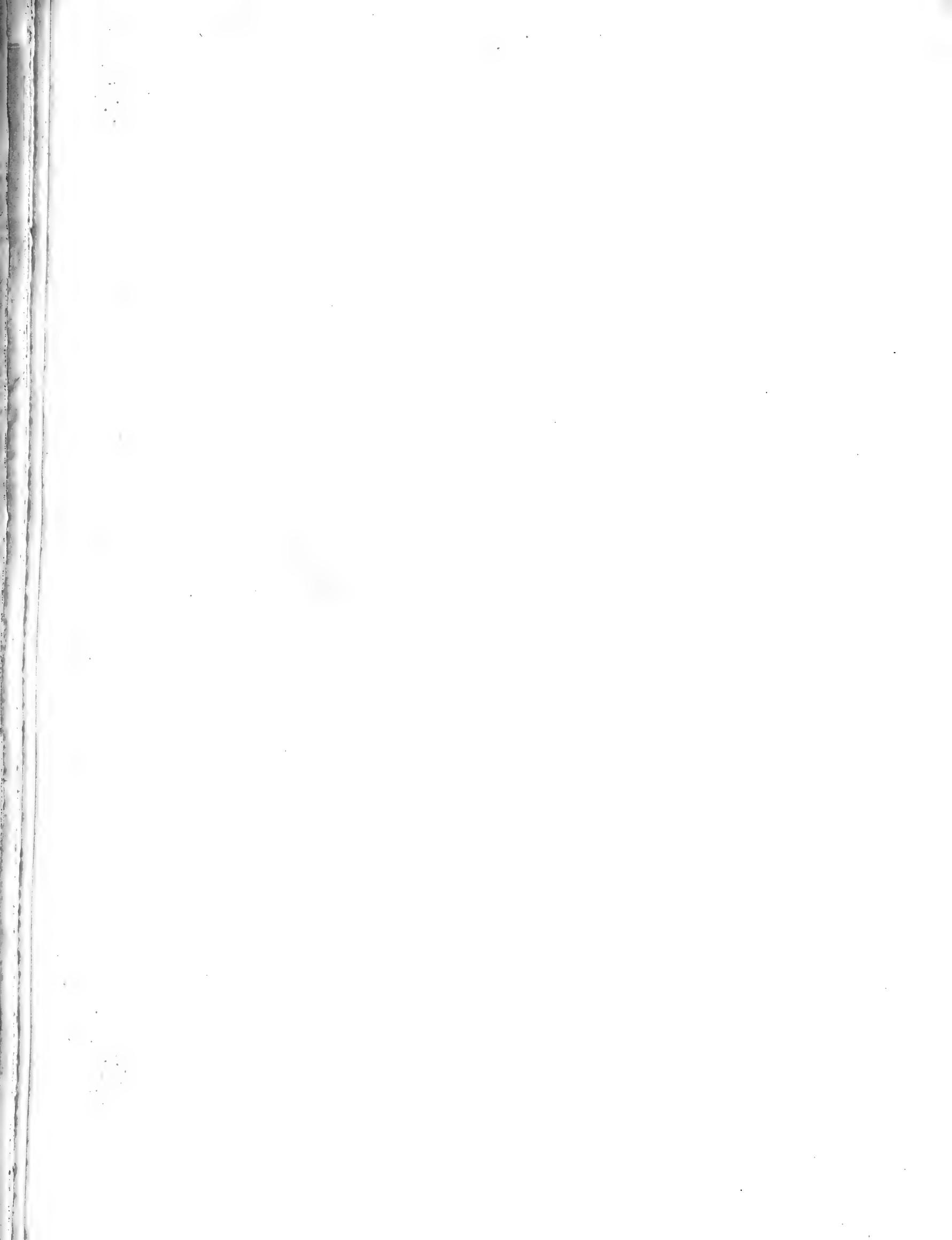


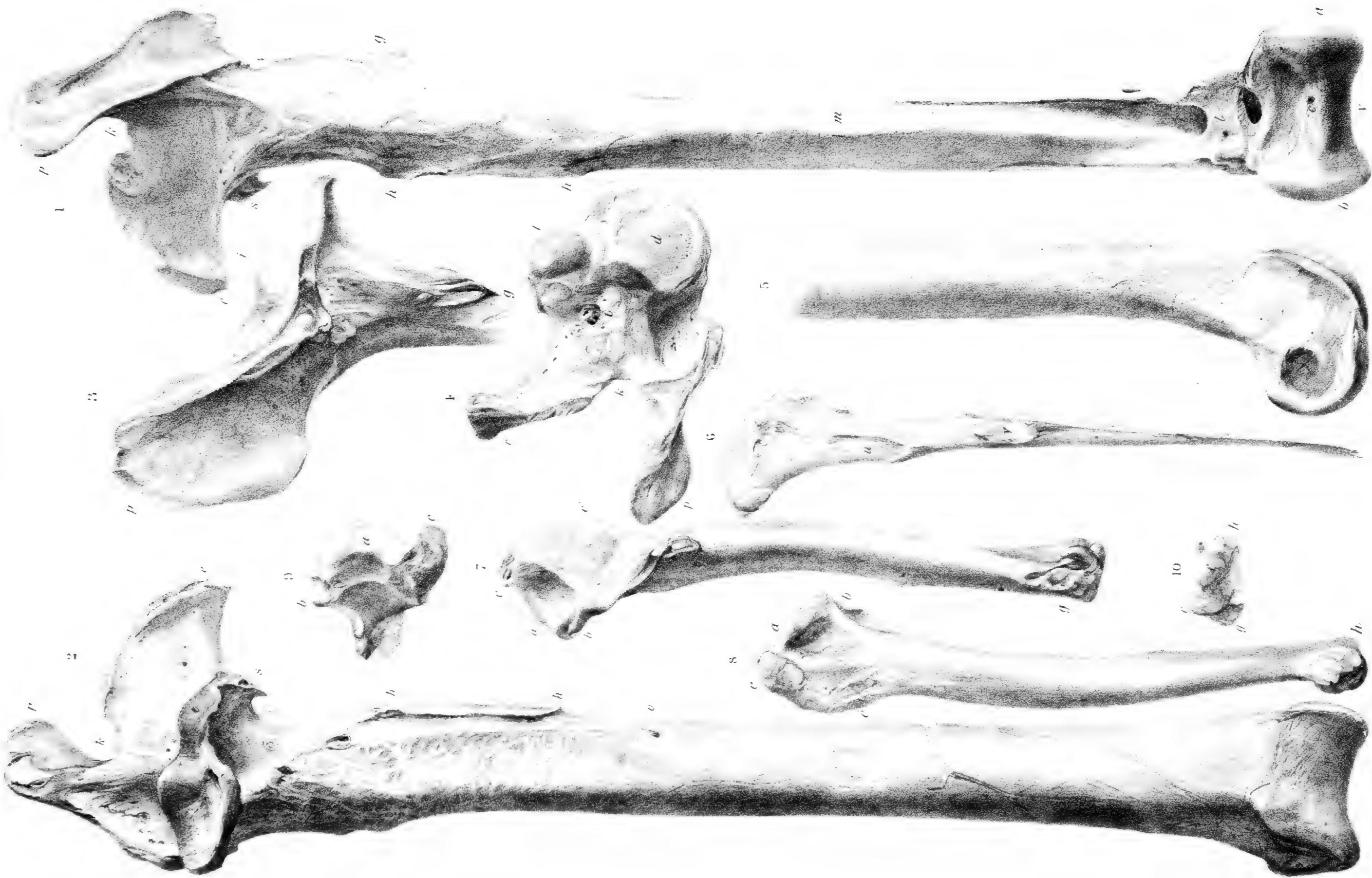


From Natur-Stone by J. Herxleben

M. & N. Hanhart imp.

1. AB. CENOMJORNIS. 5. 6. DENTORNIS. GERANOIDES.





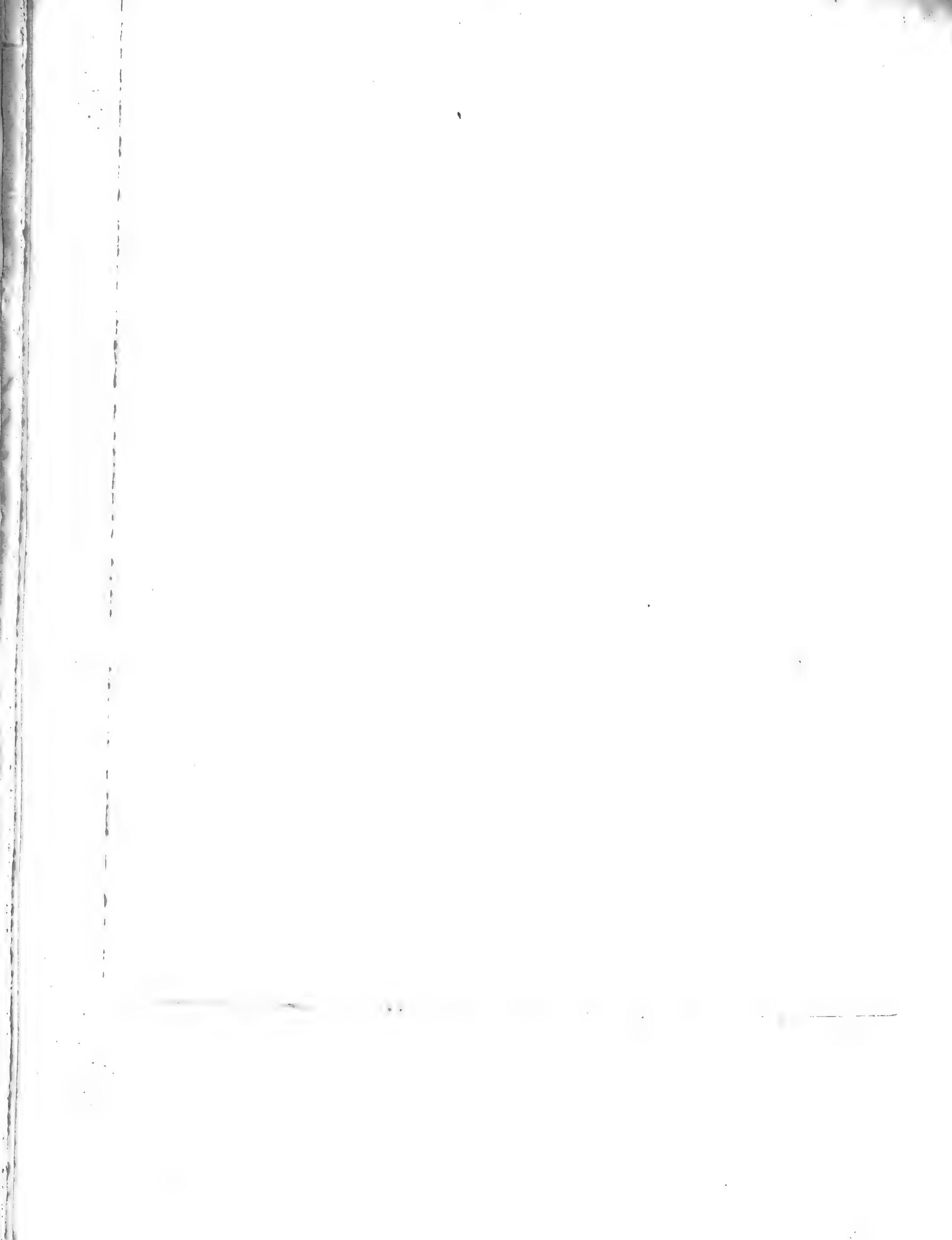
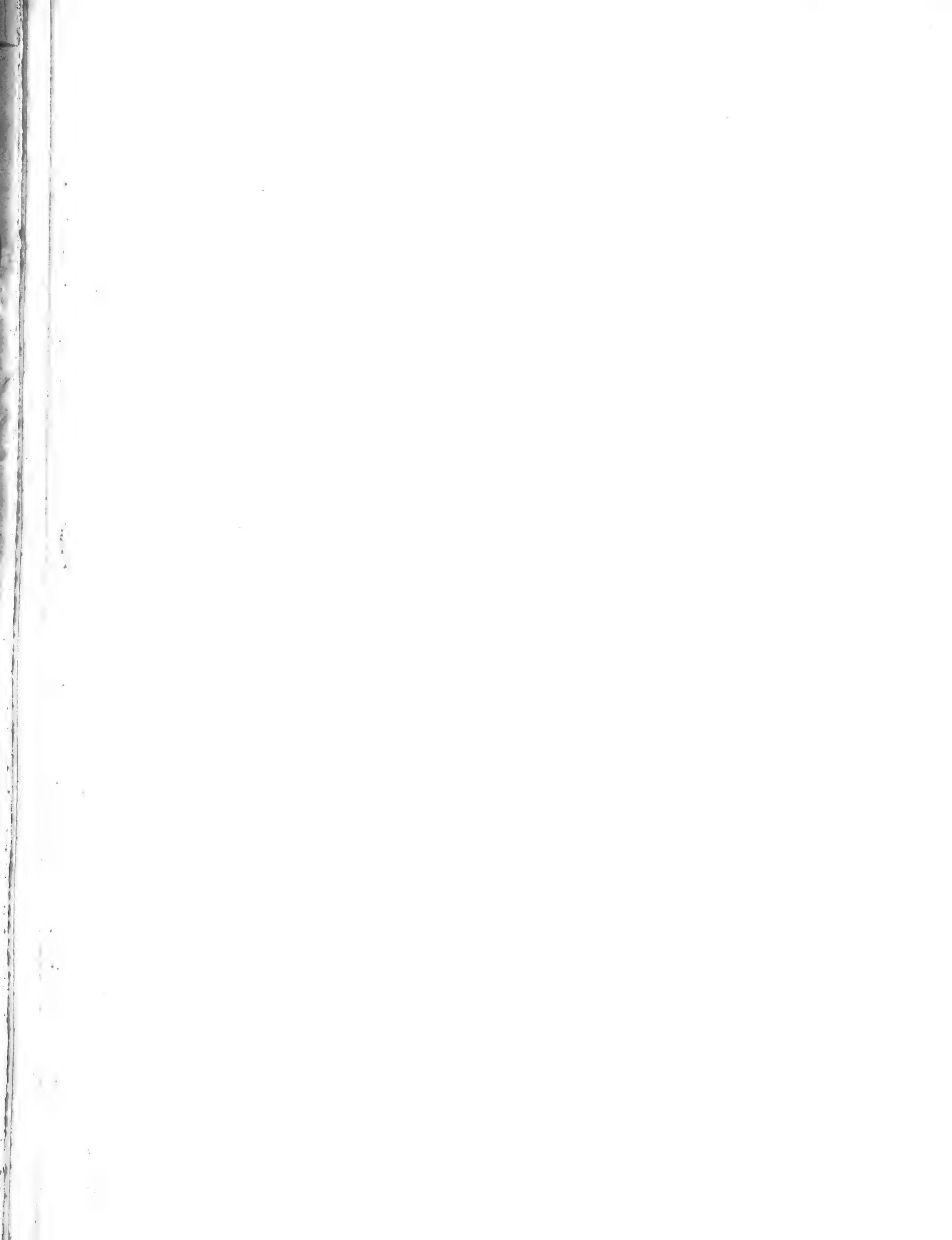
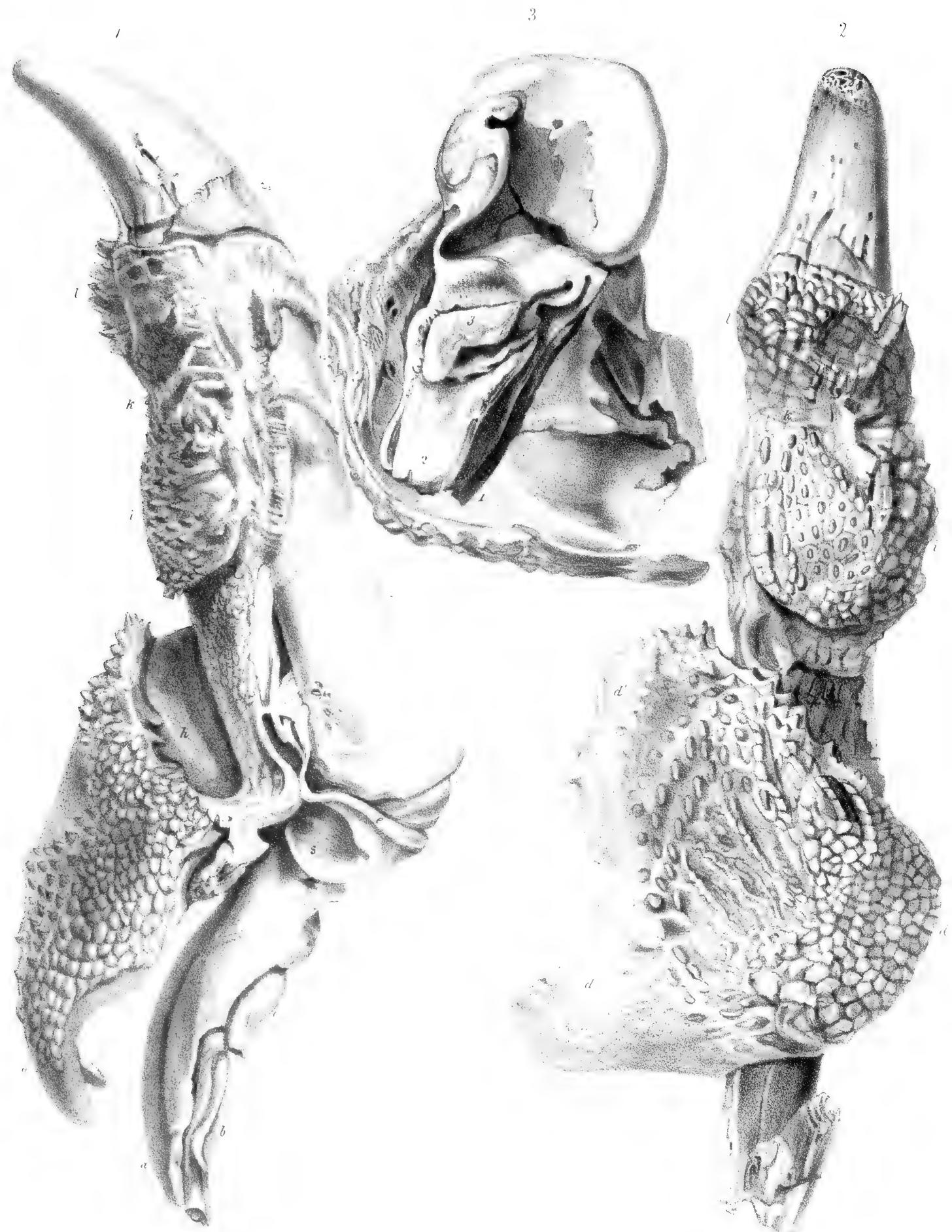
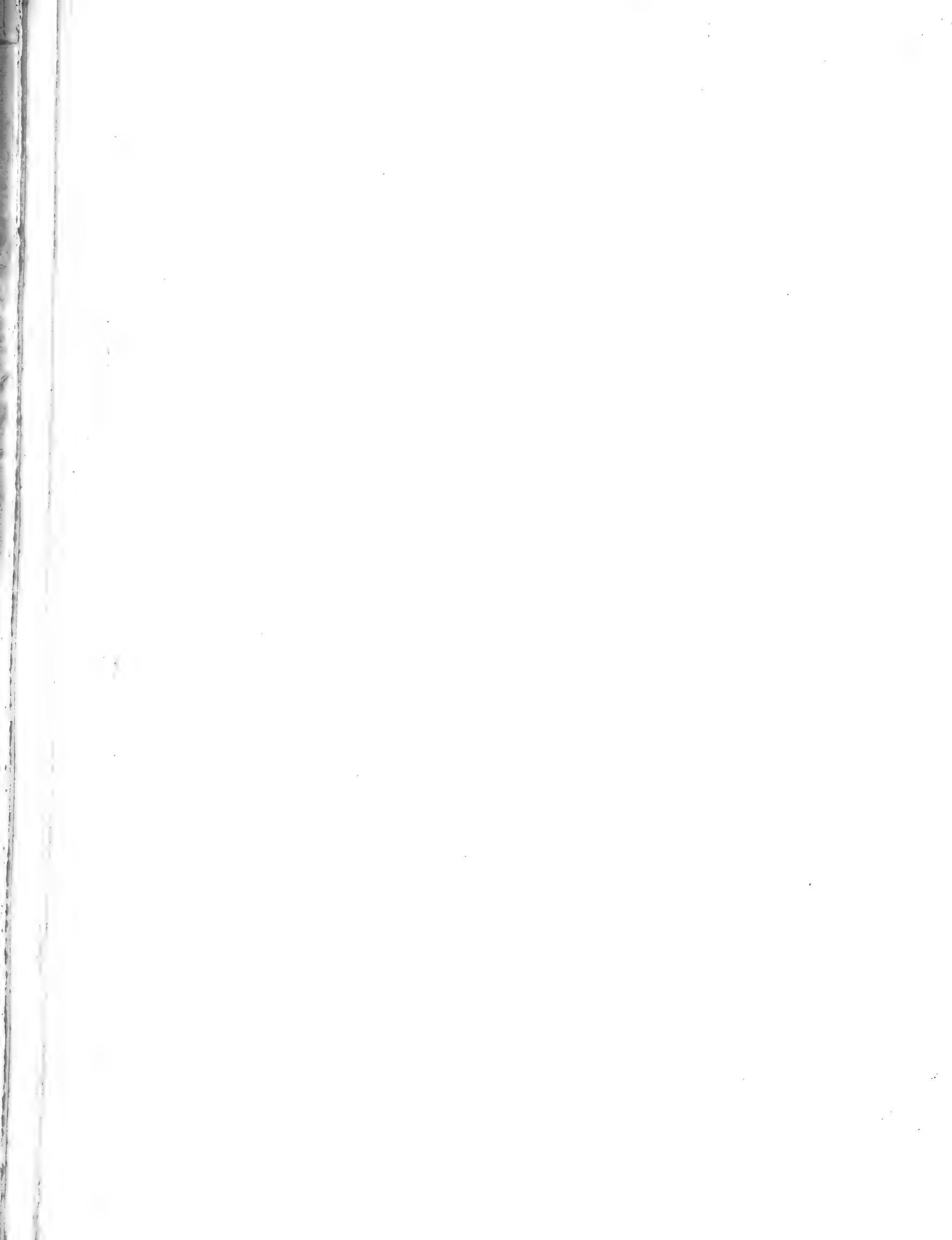


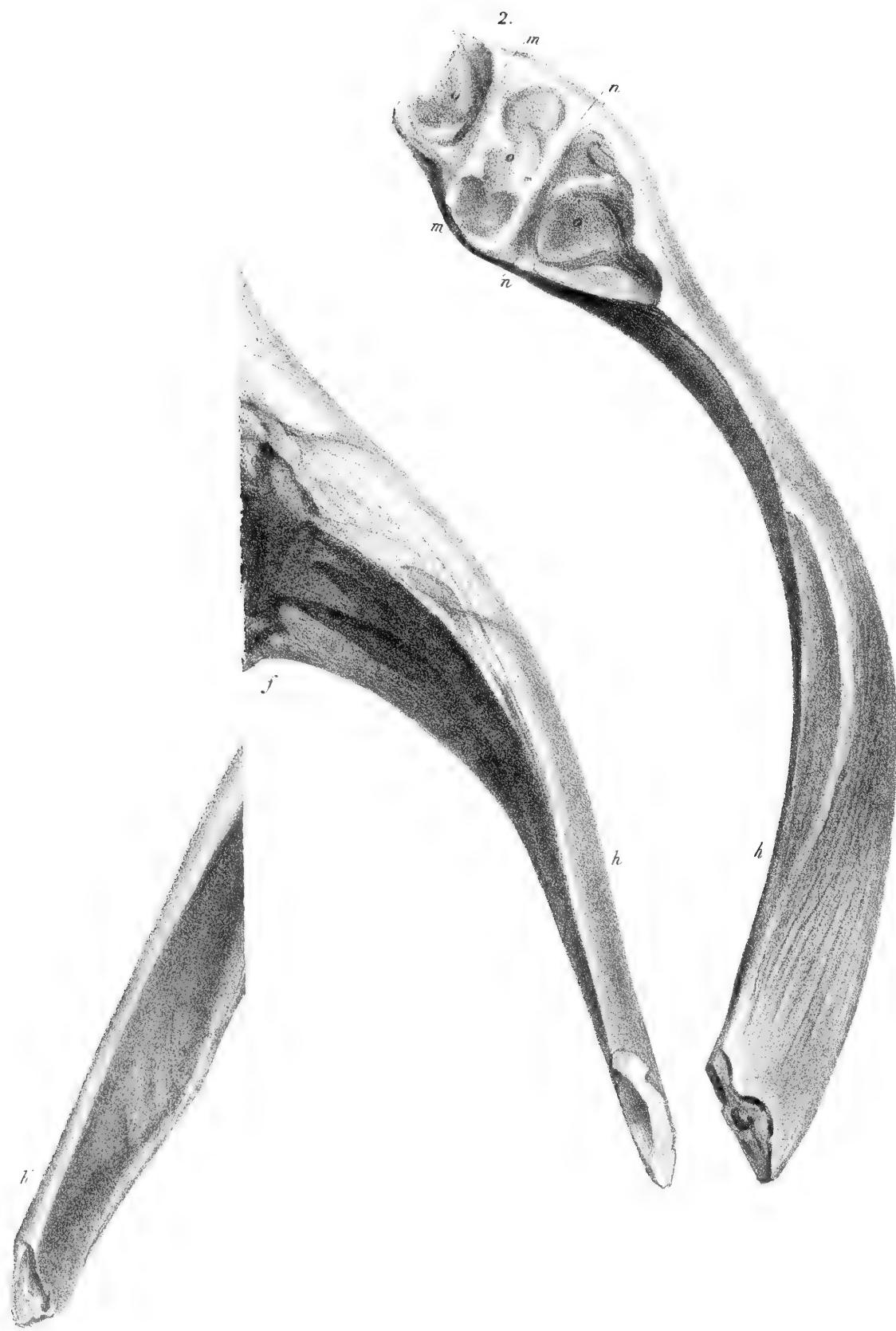
PLATE LXX.

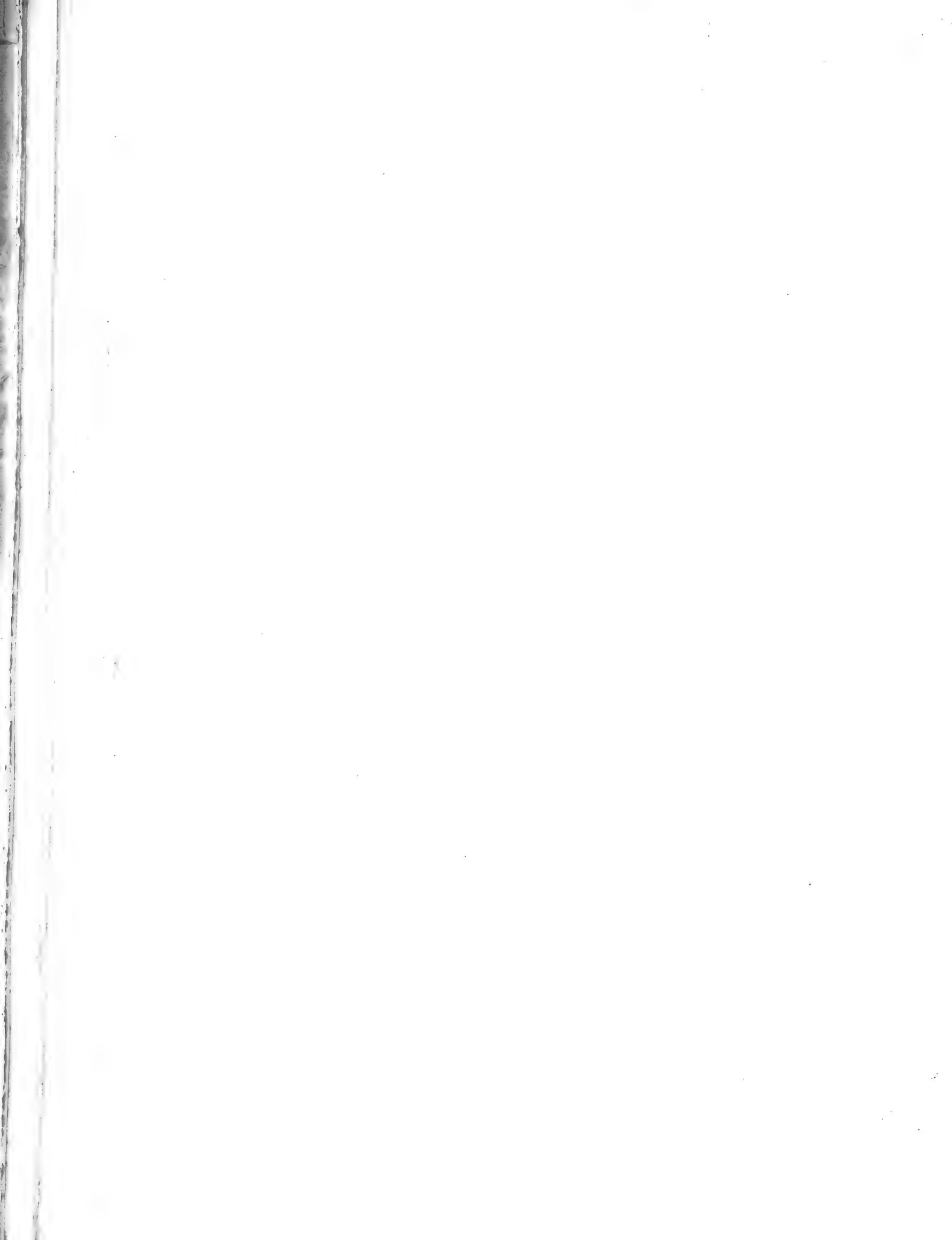


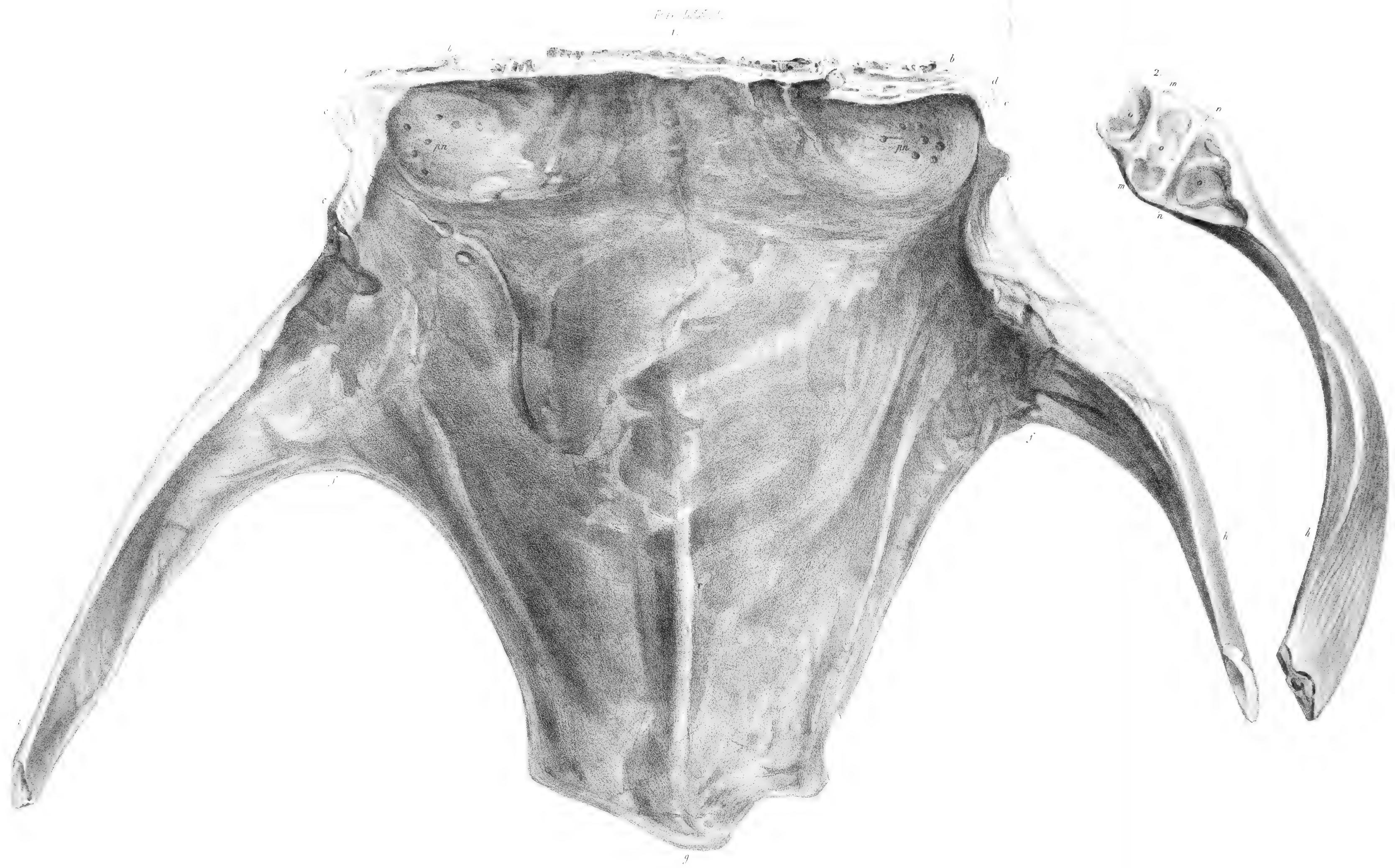






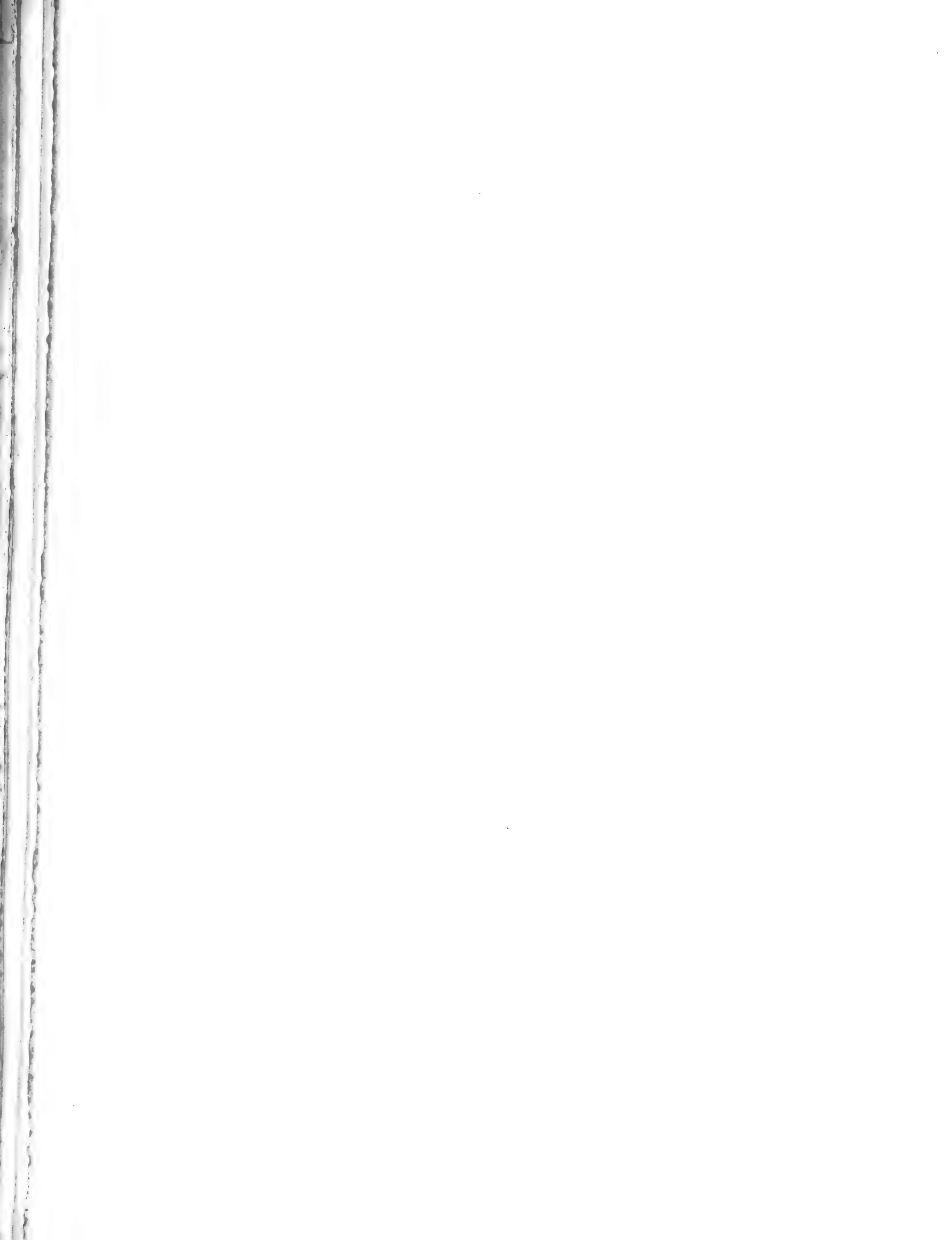


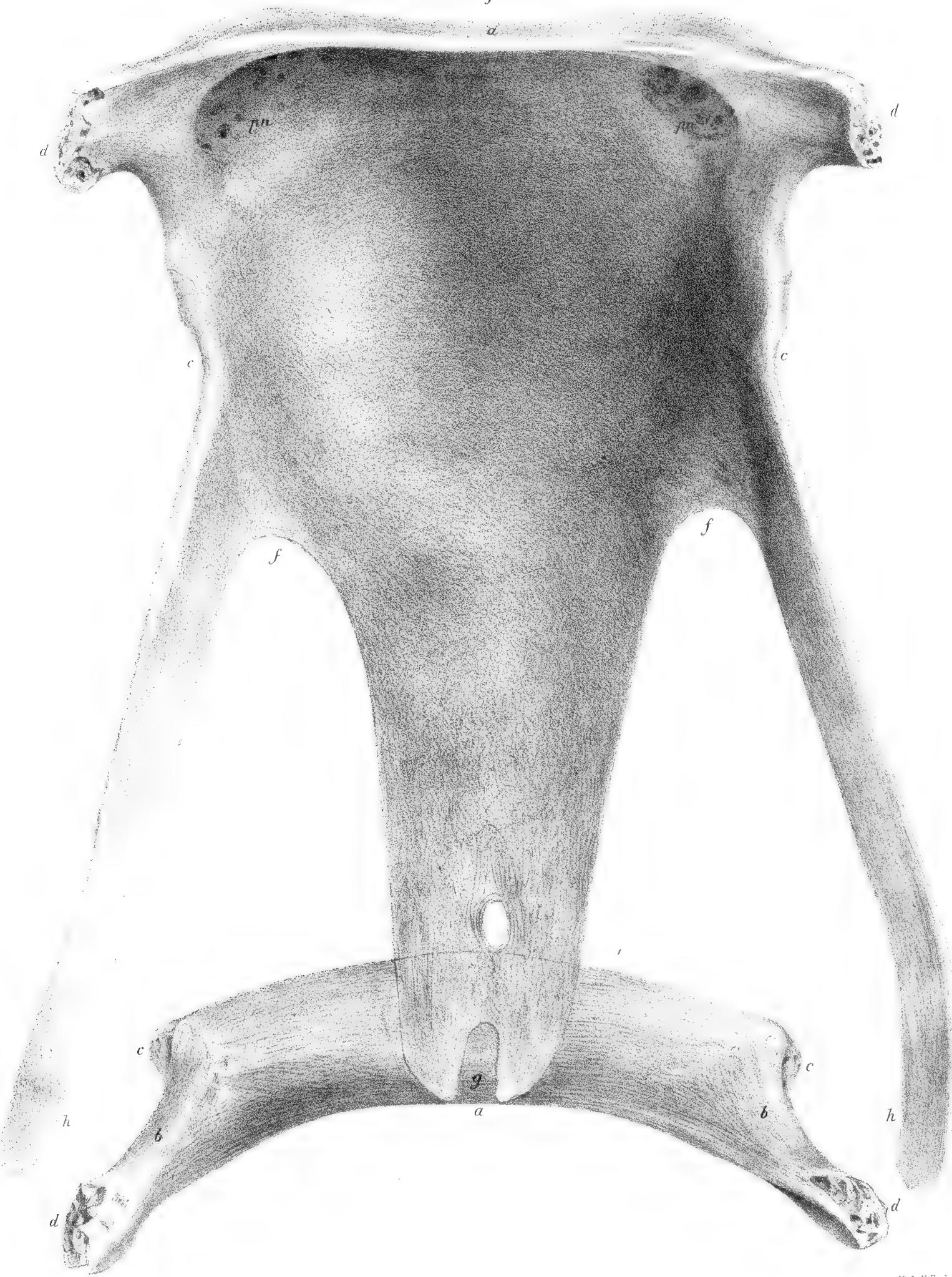


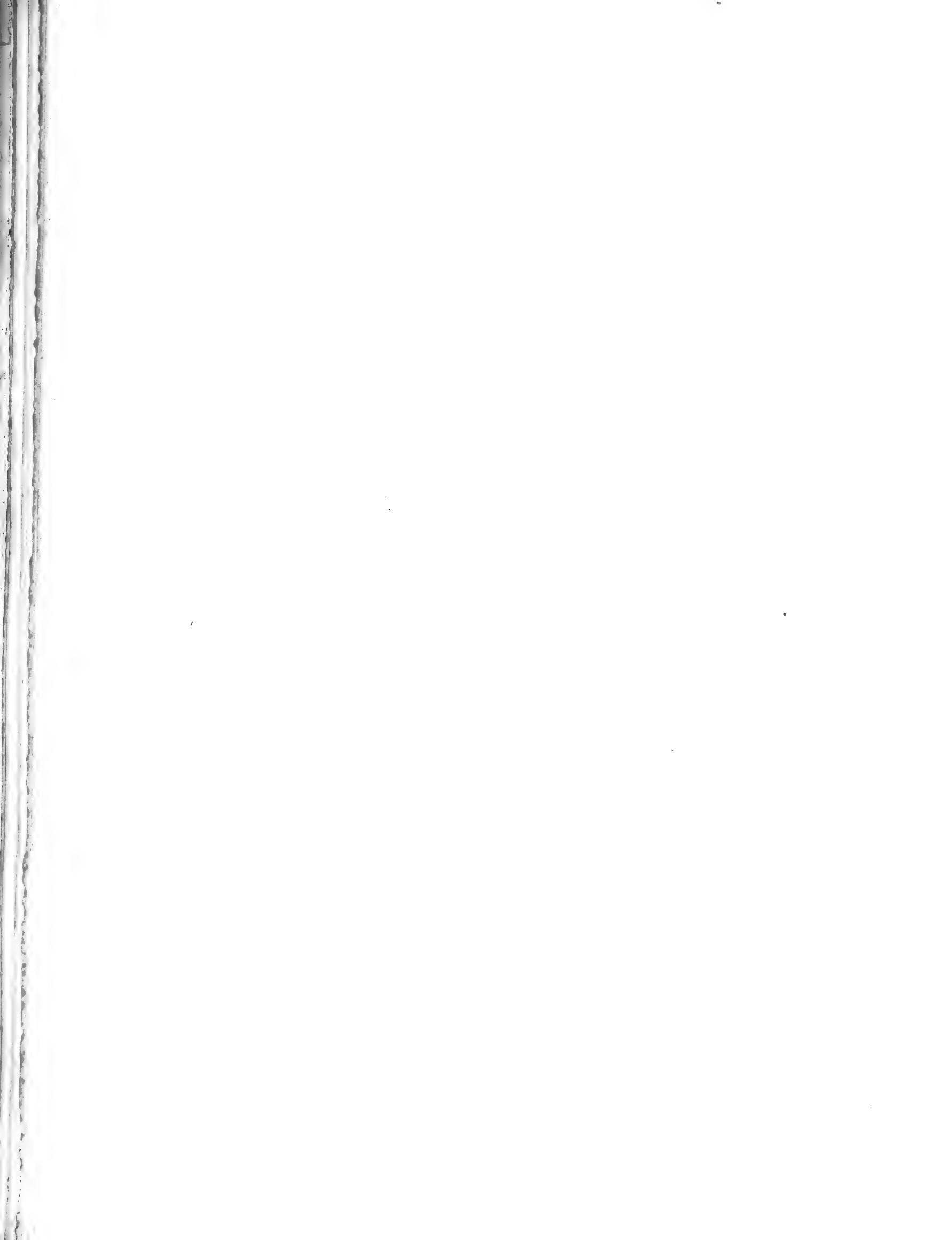


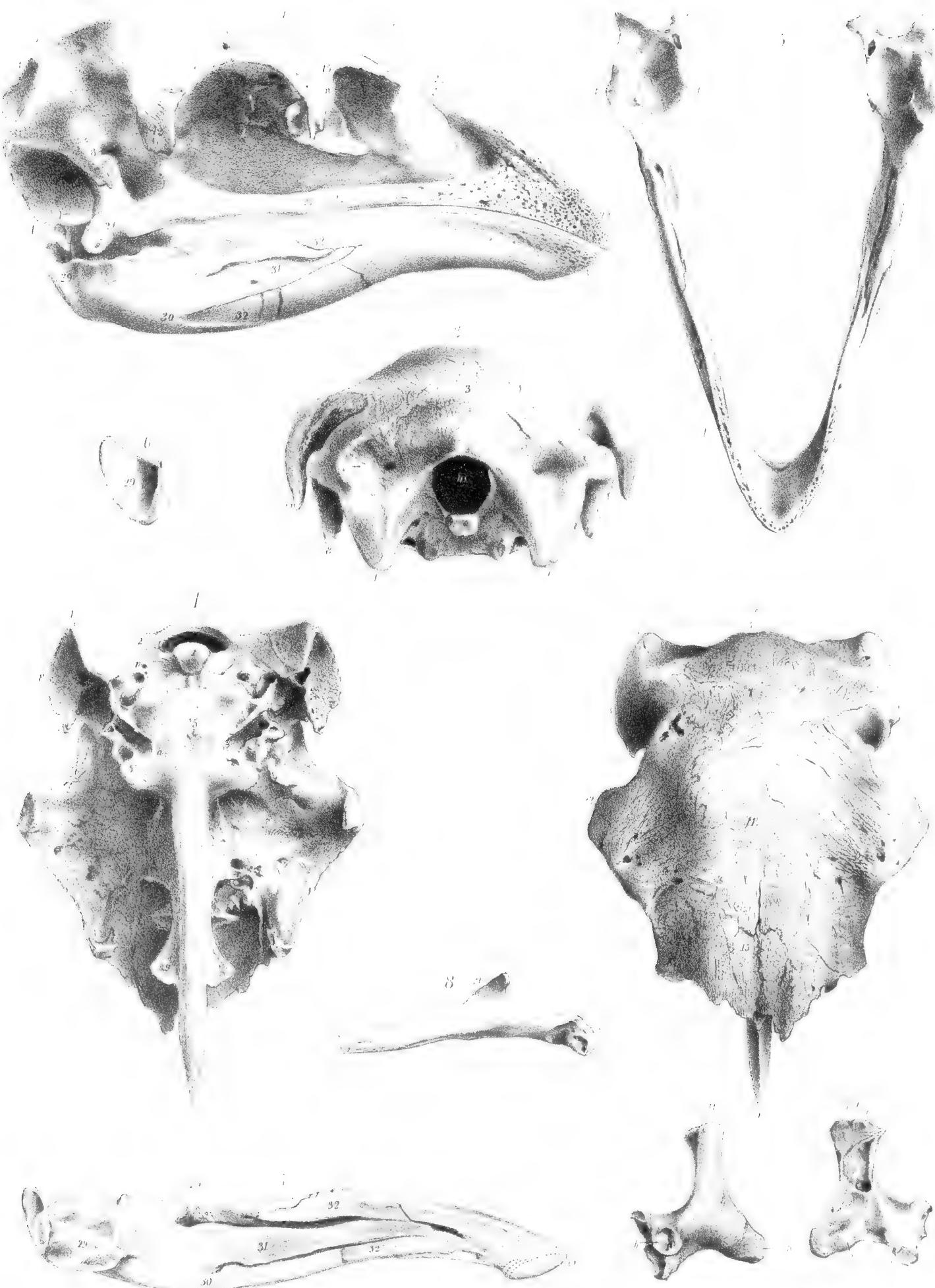


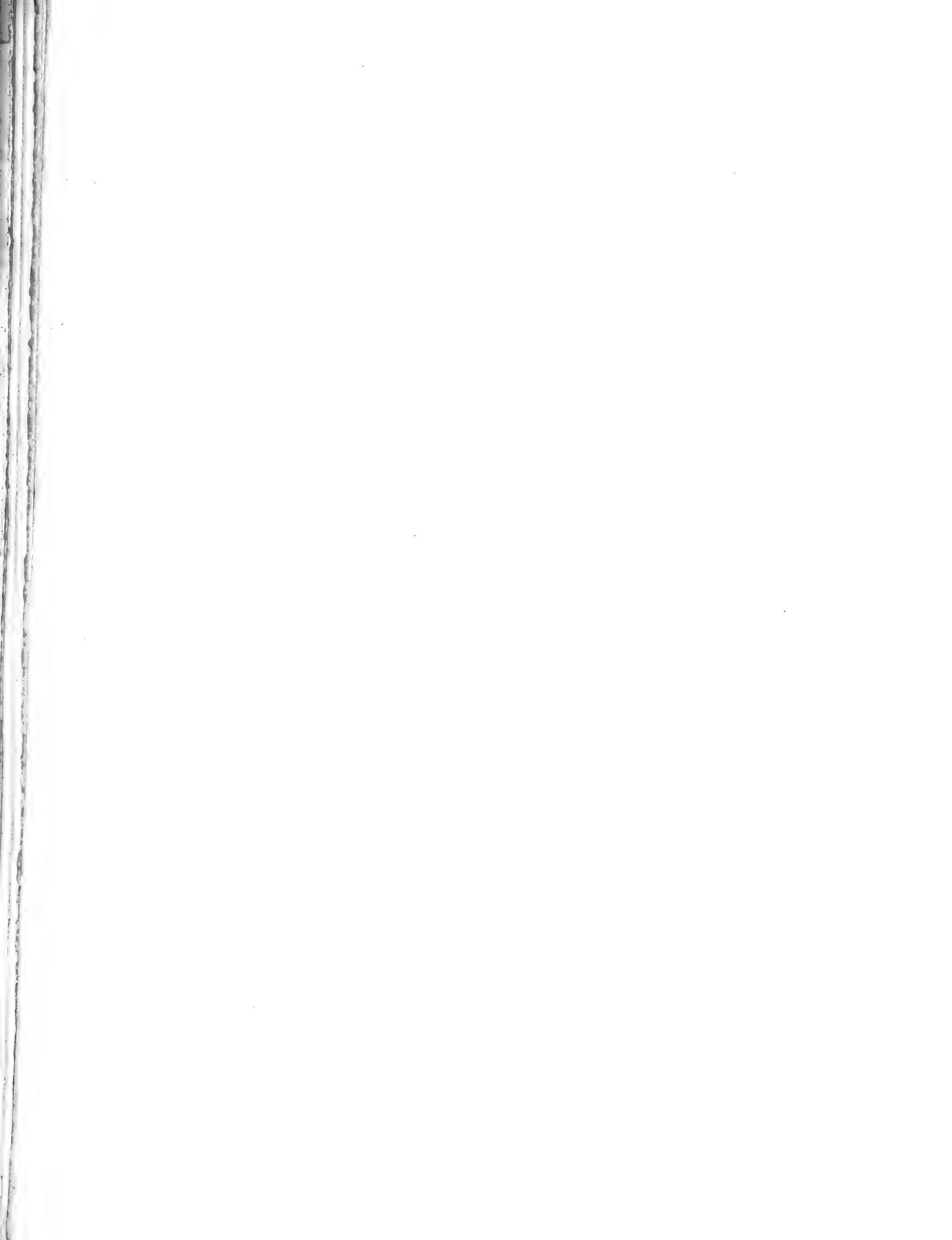


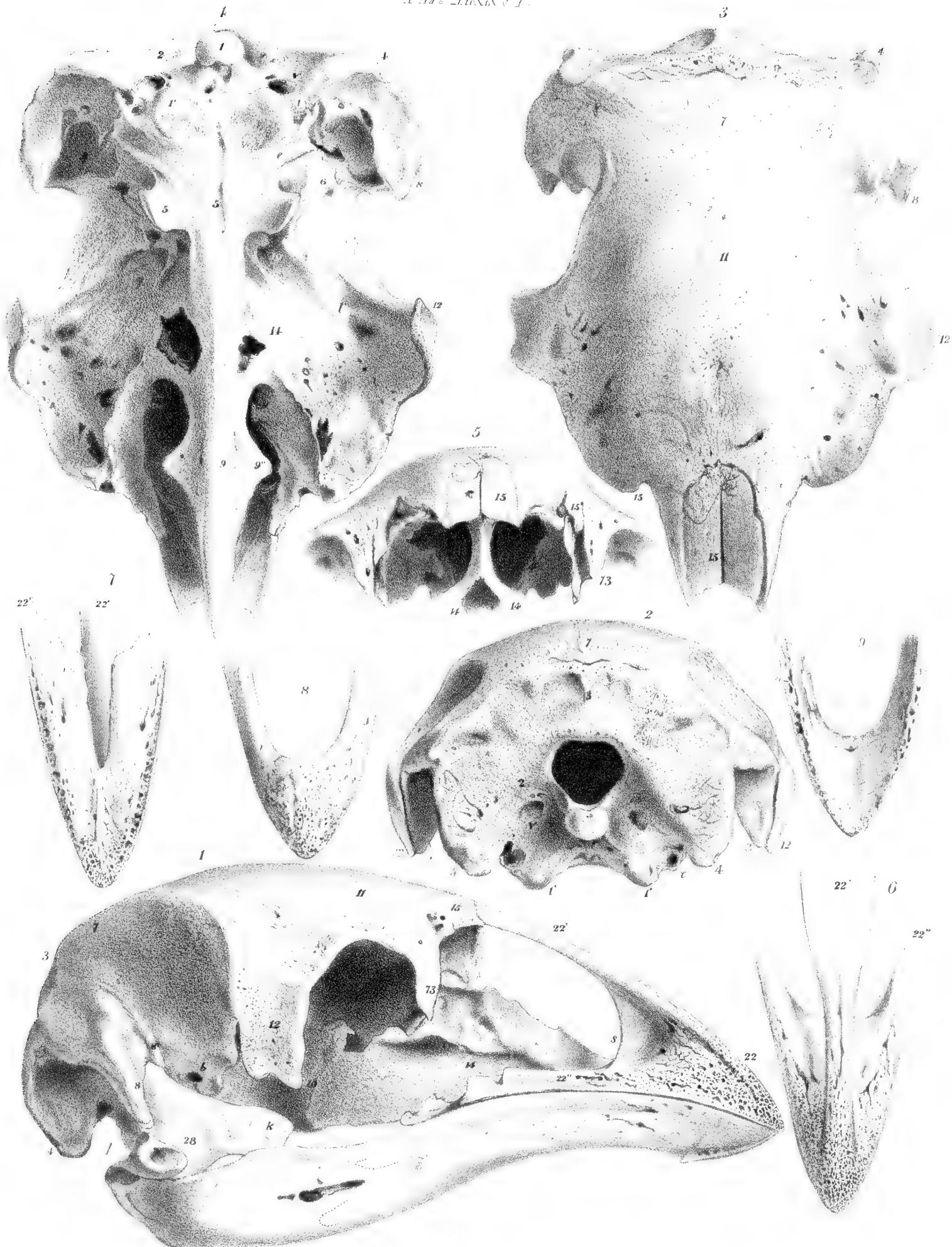


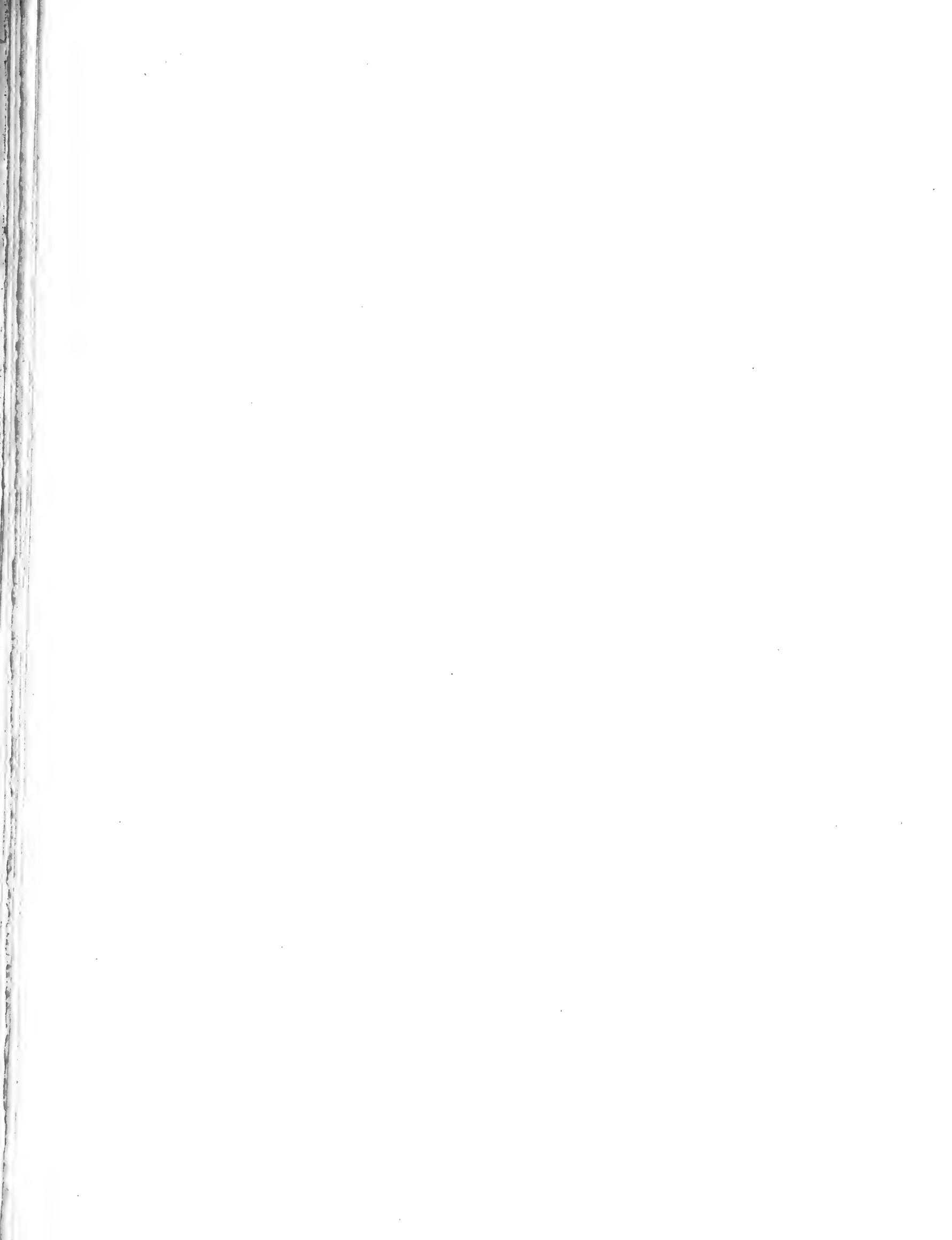


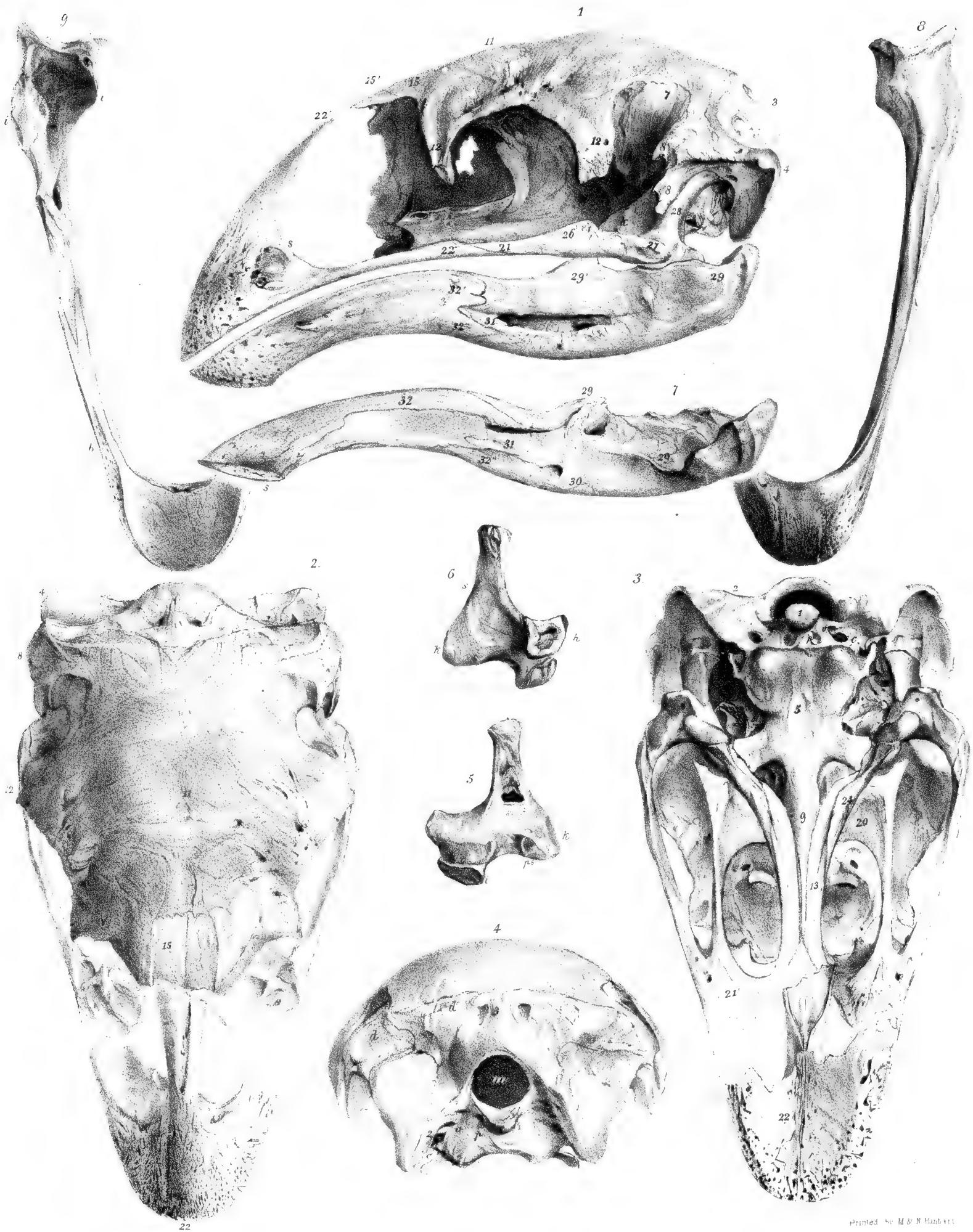


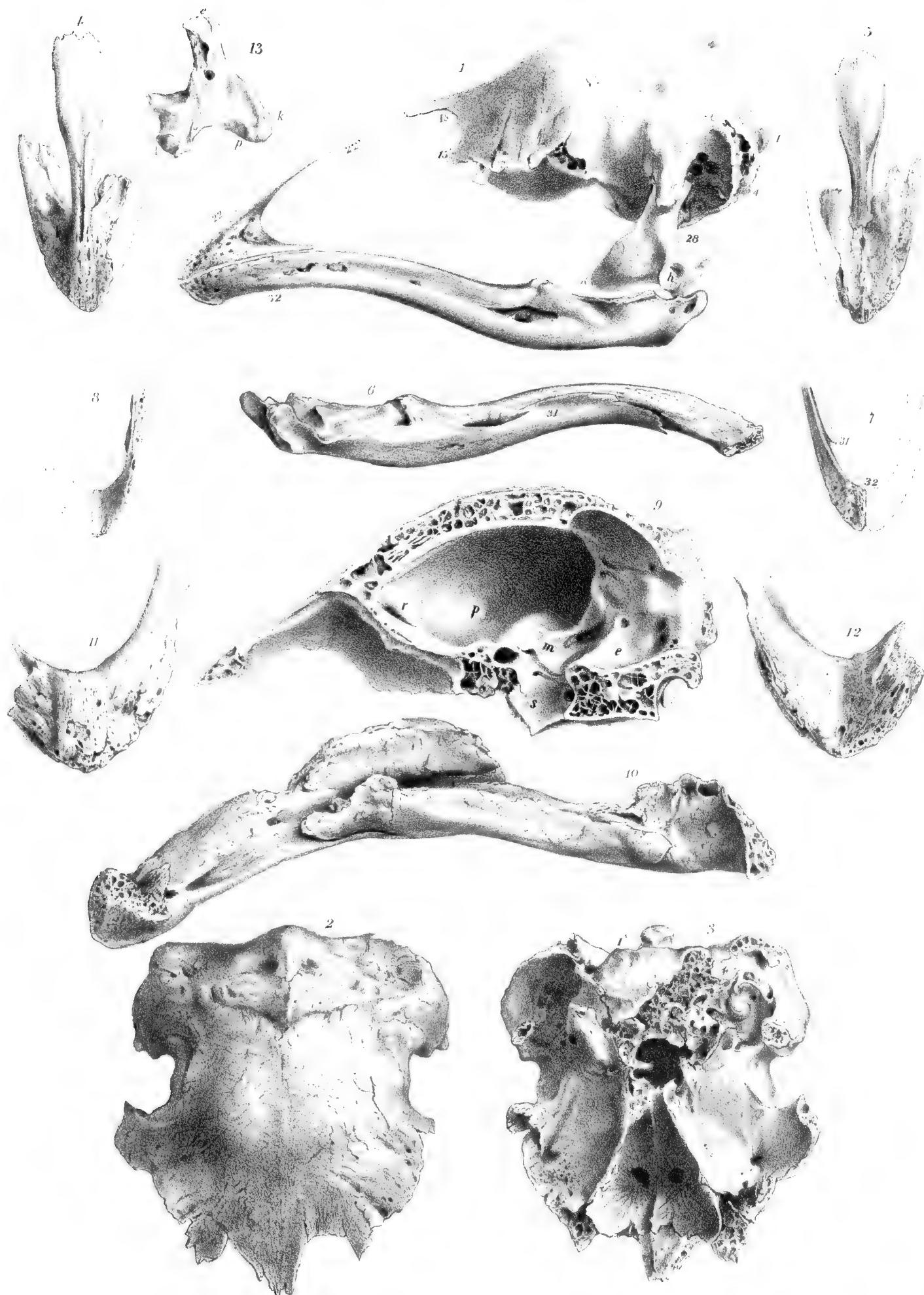


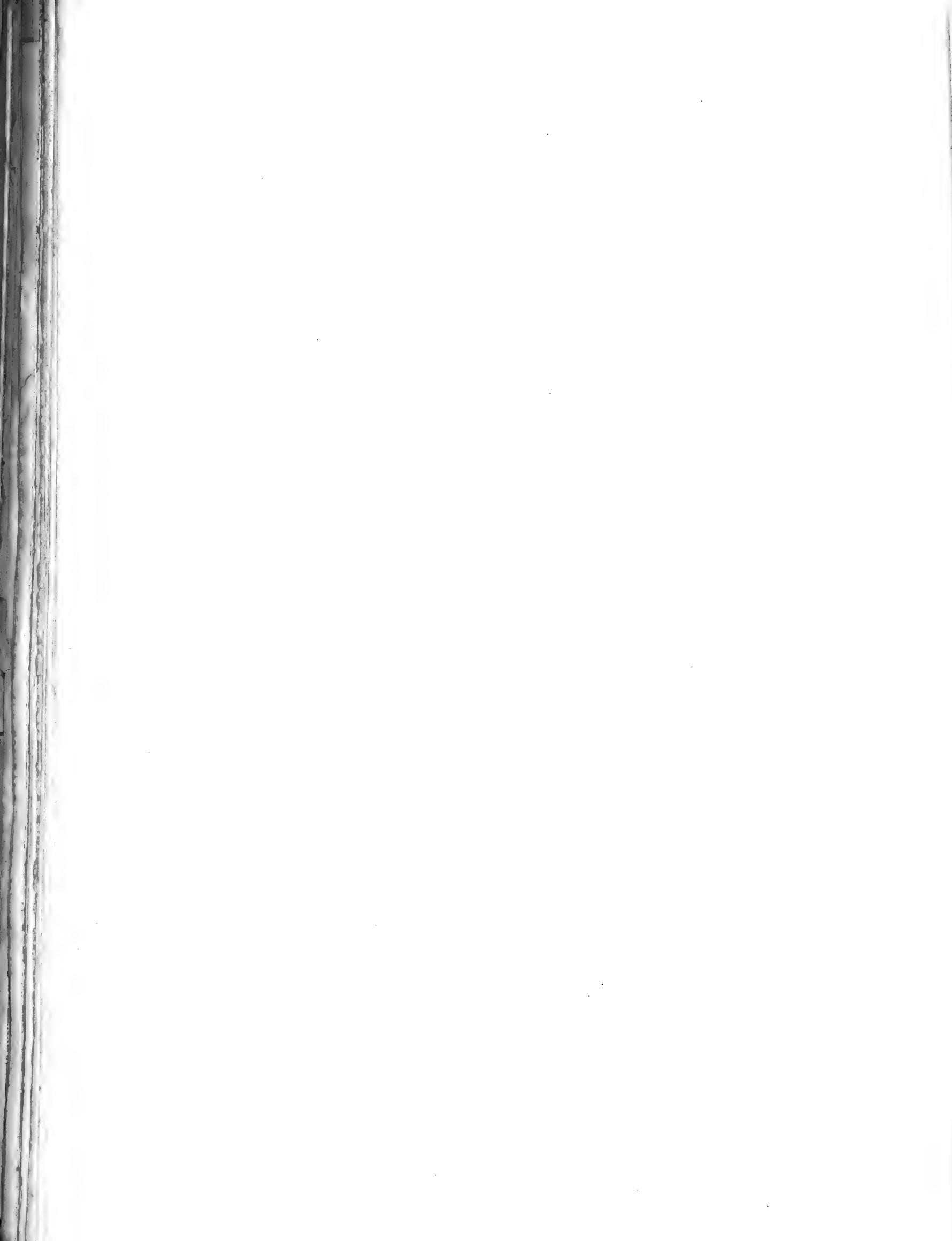


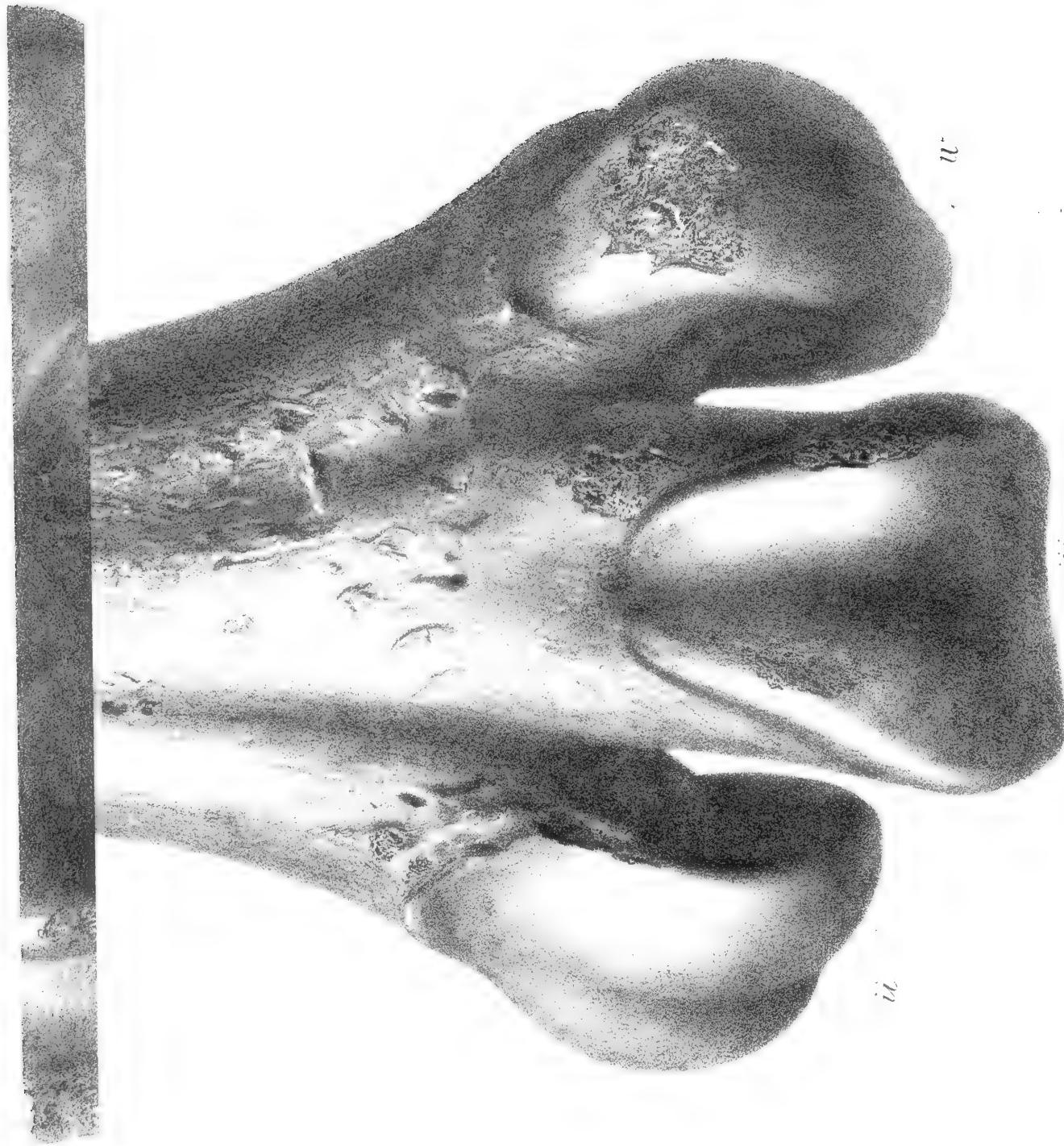








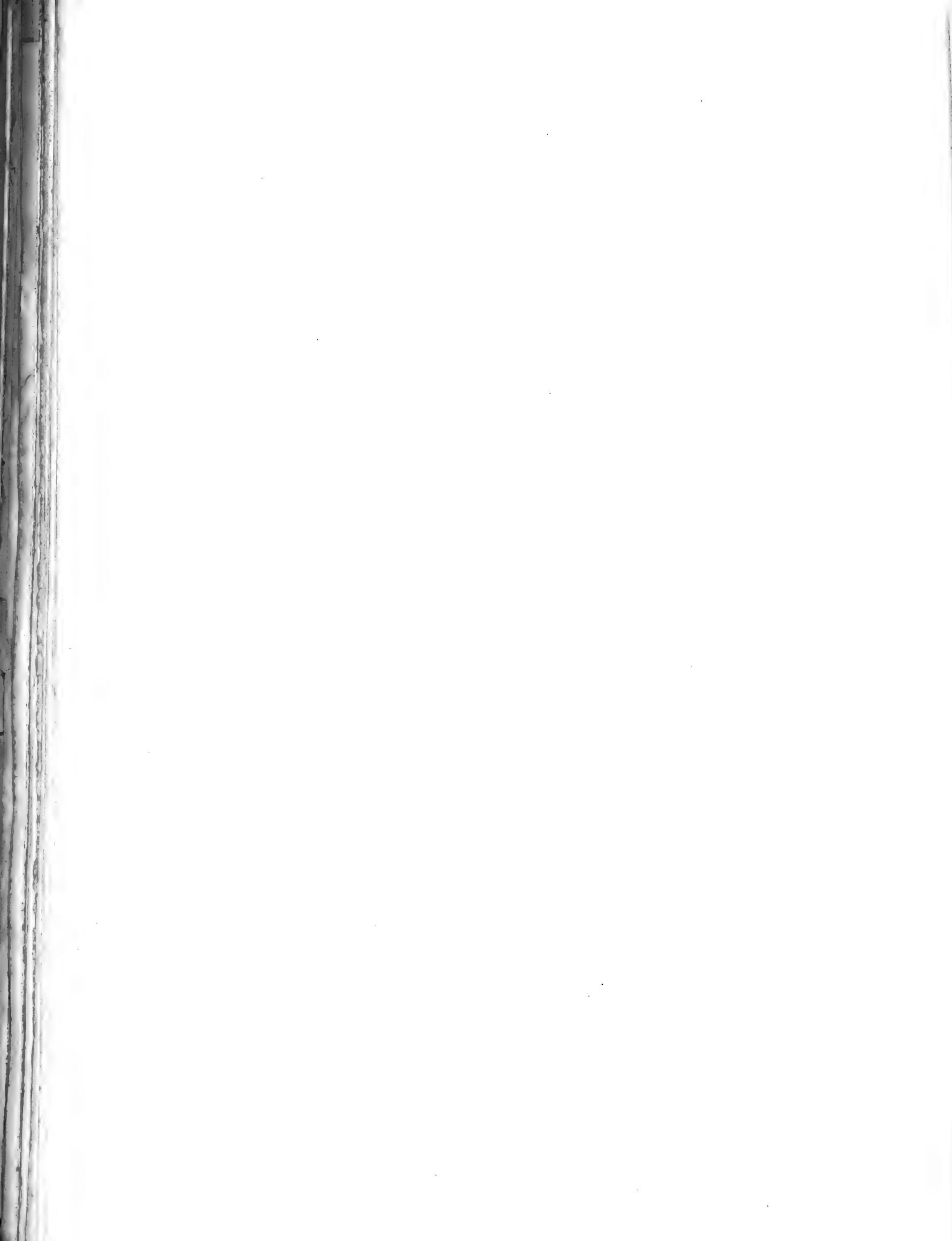




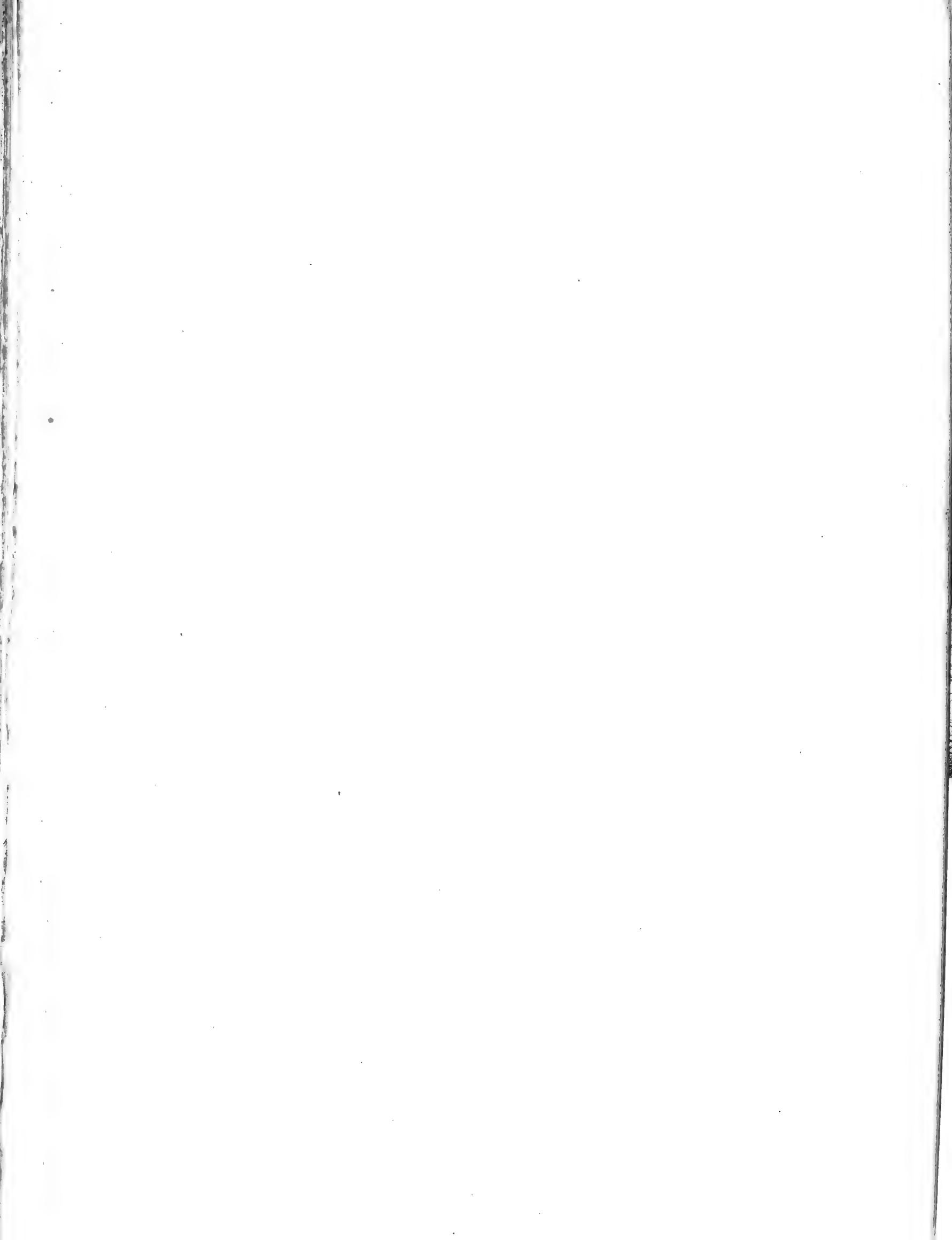
DINORNIS MAXIMUS.

M & N Hammar's Zo.

1852. Pl. 17.



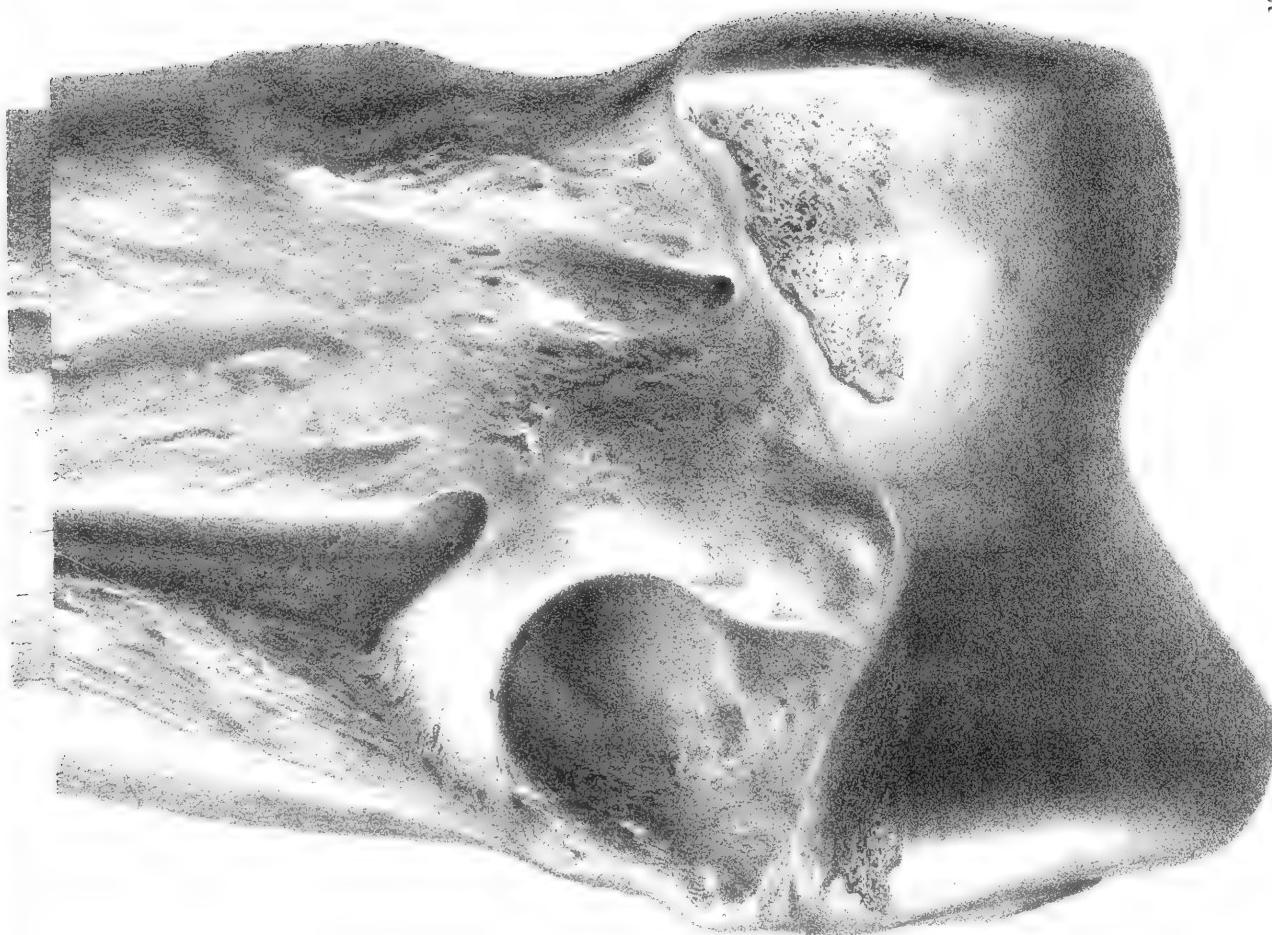




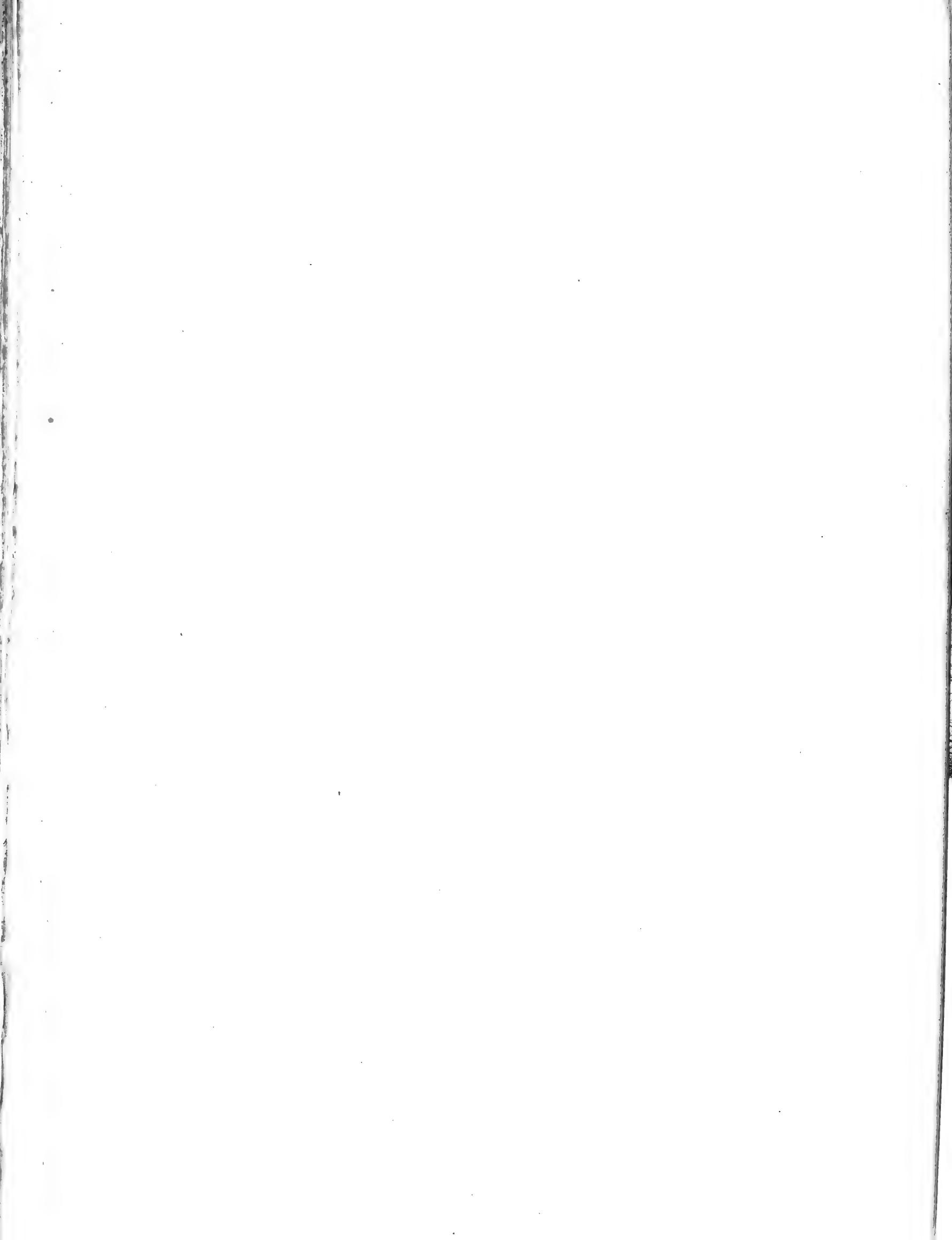
DINORNIS MAXIMUS

M. & N. Hartung, imp.

Dinkel del et. ill.



Y



DINOSAURUS MAXIMUS



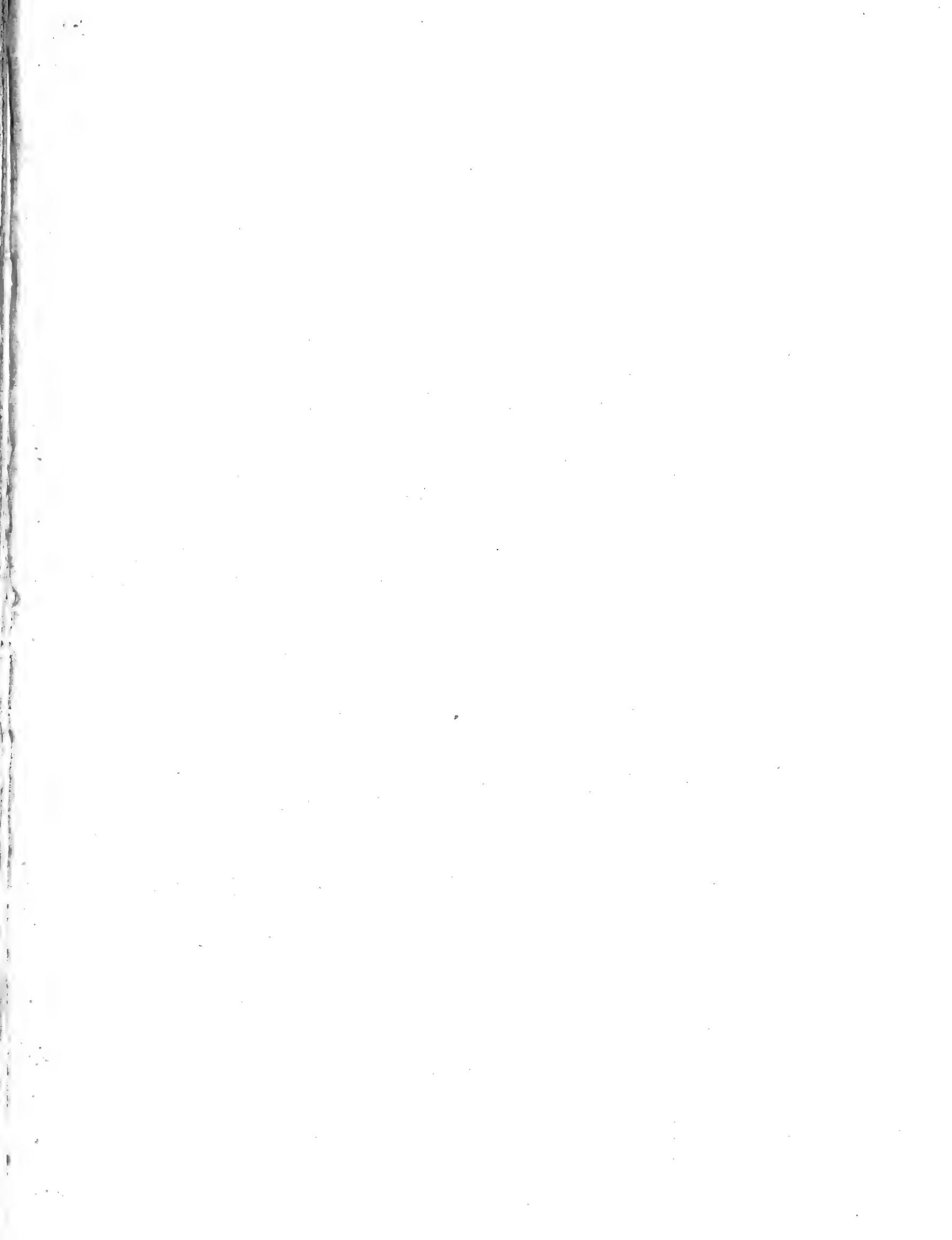
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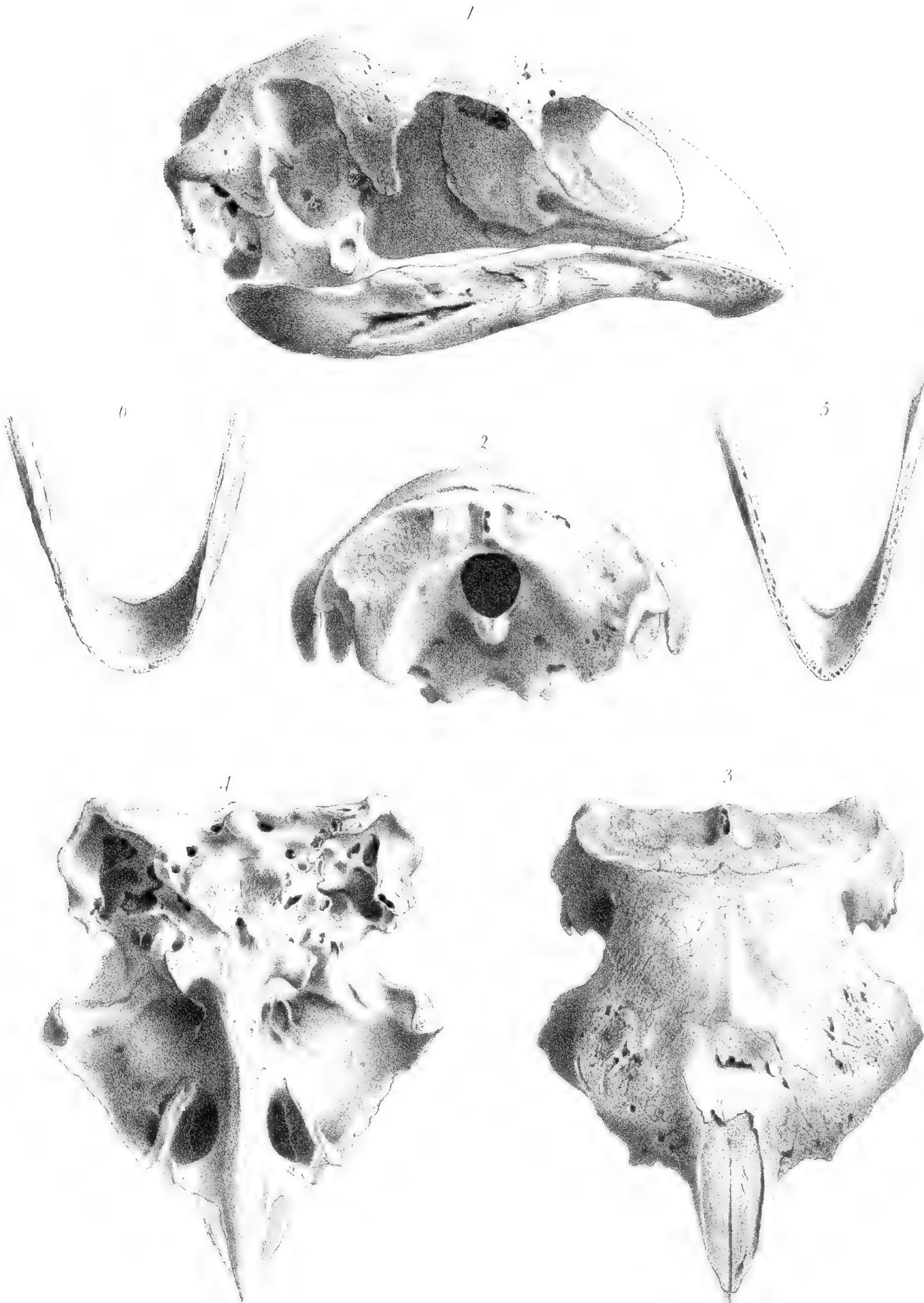
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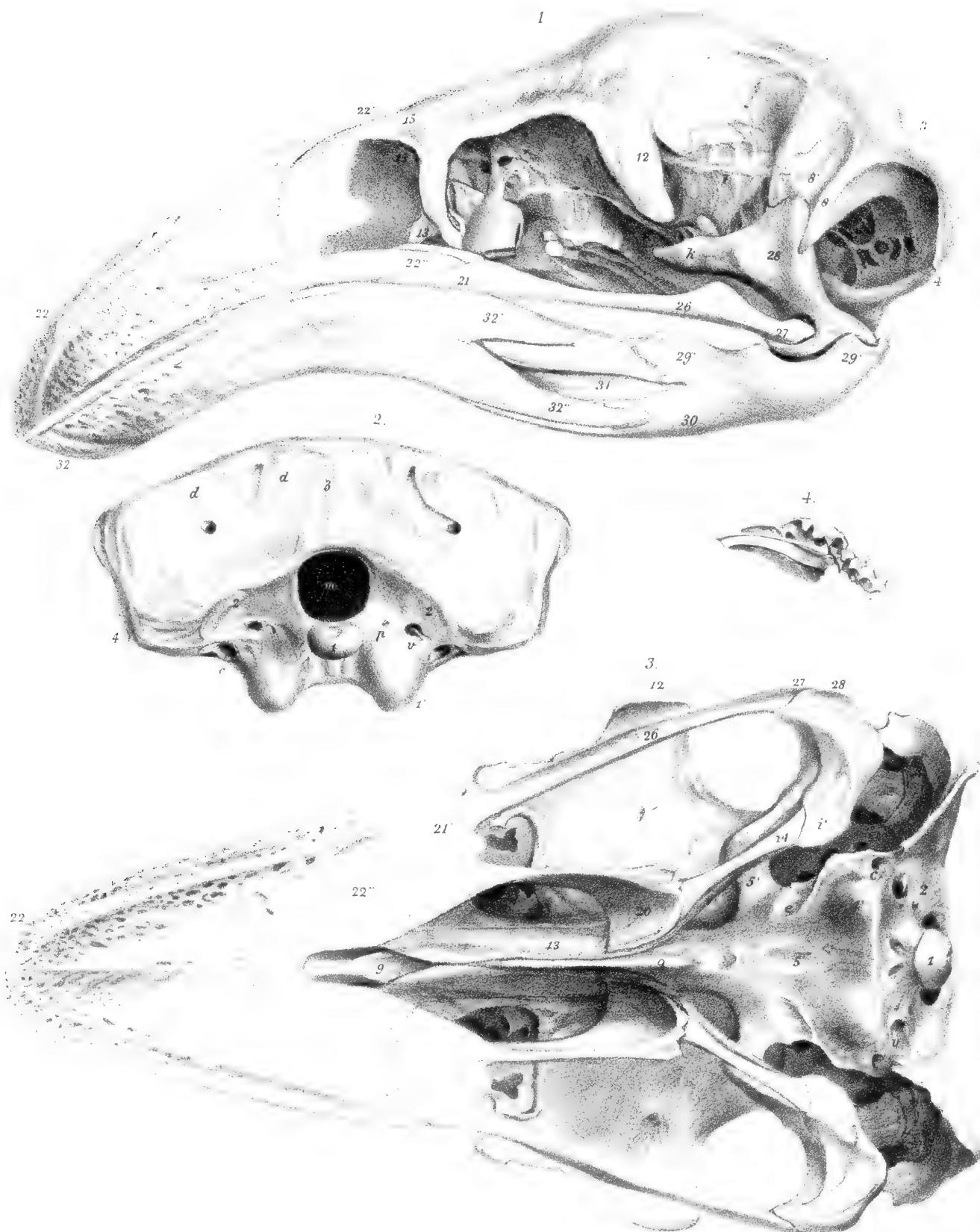
DINOSAURUS MAXIMUS

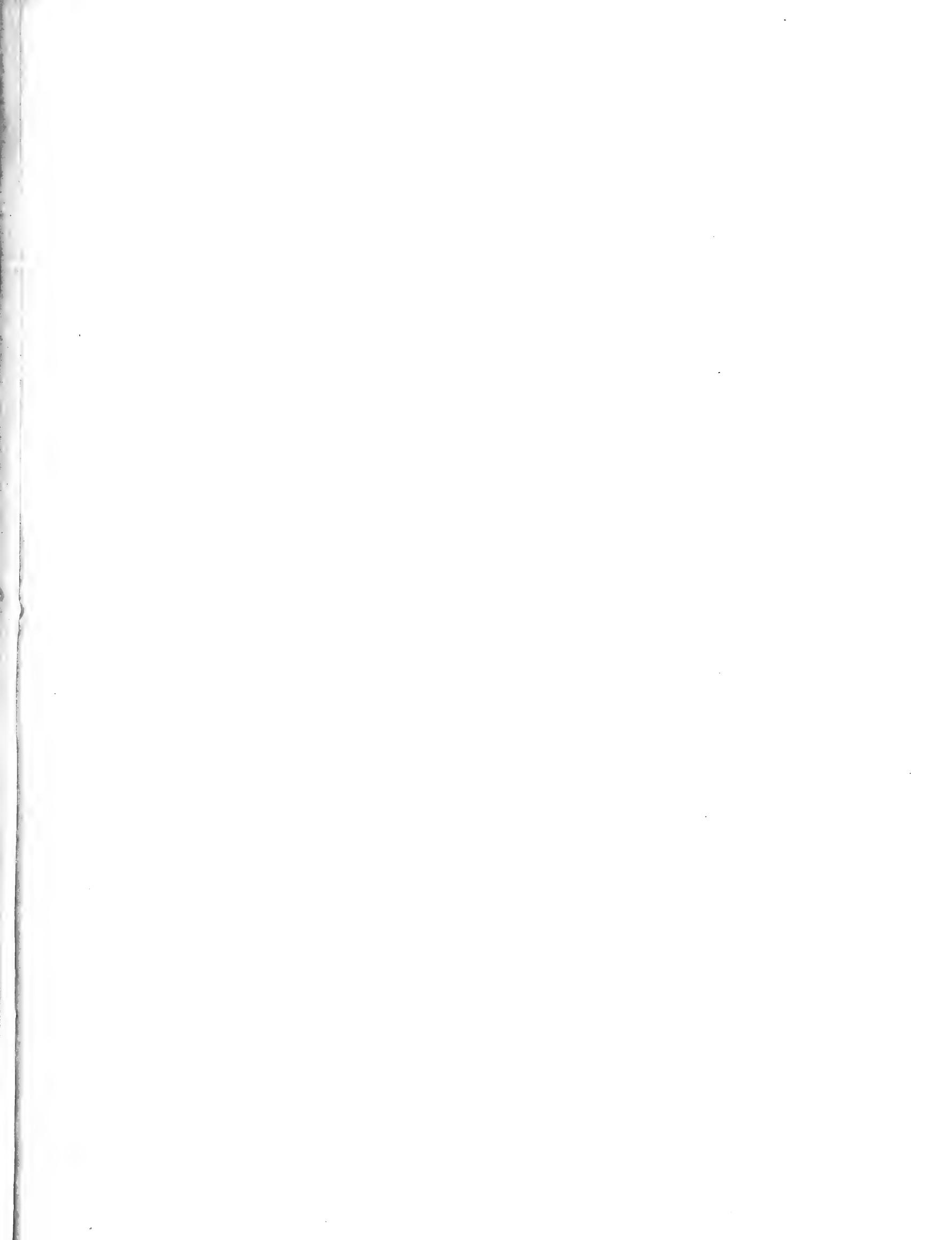
PLATE IV.

2













9



1



10



7



32

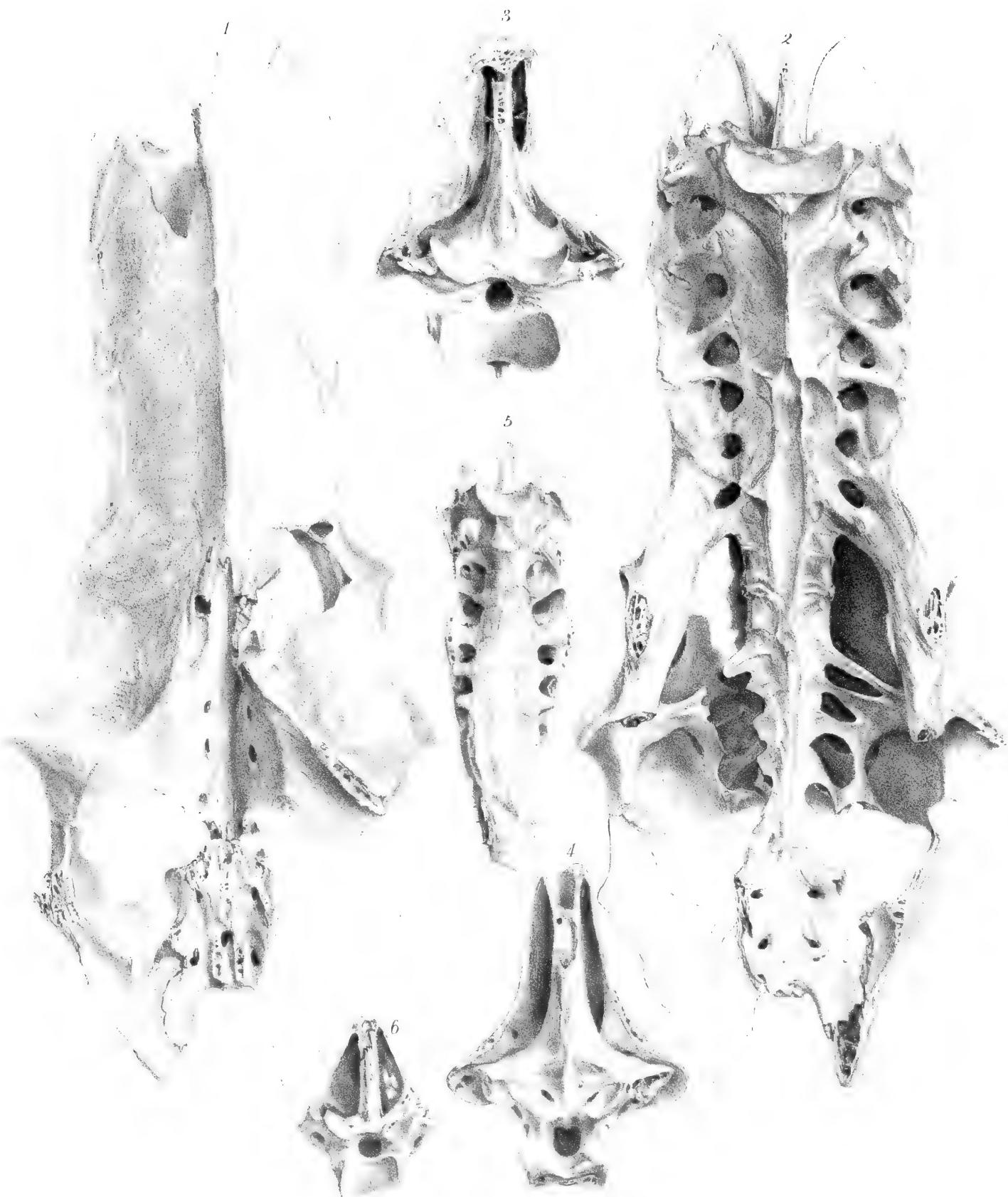


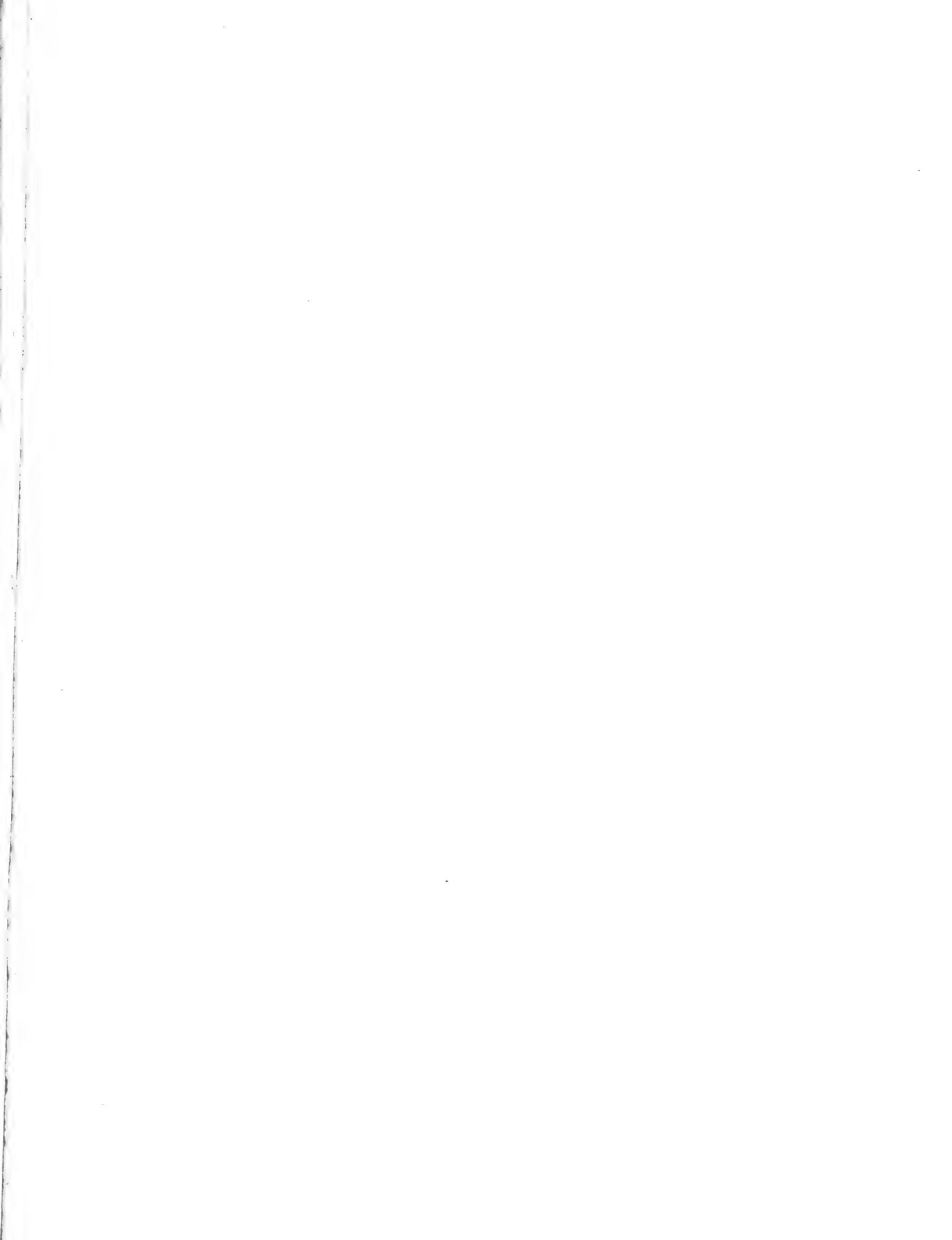
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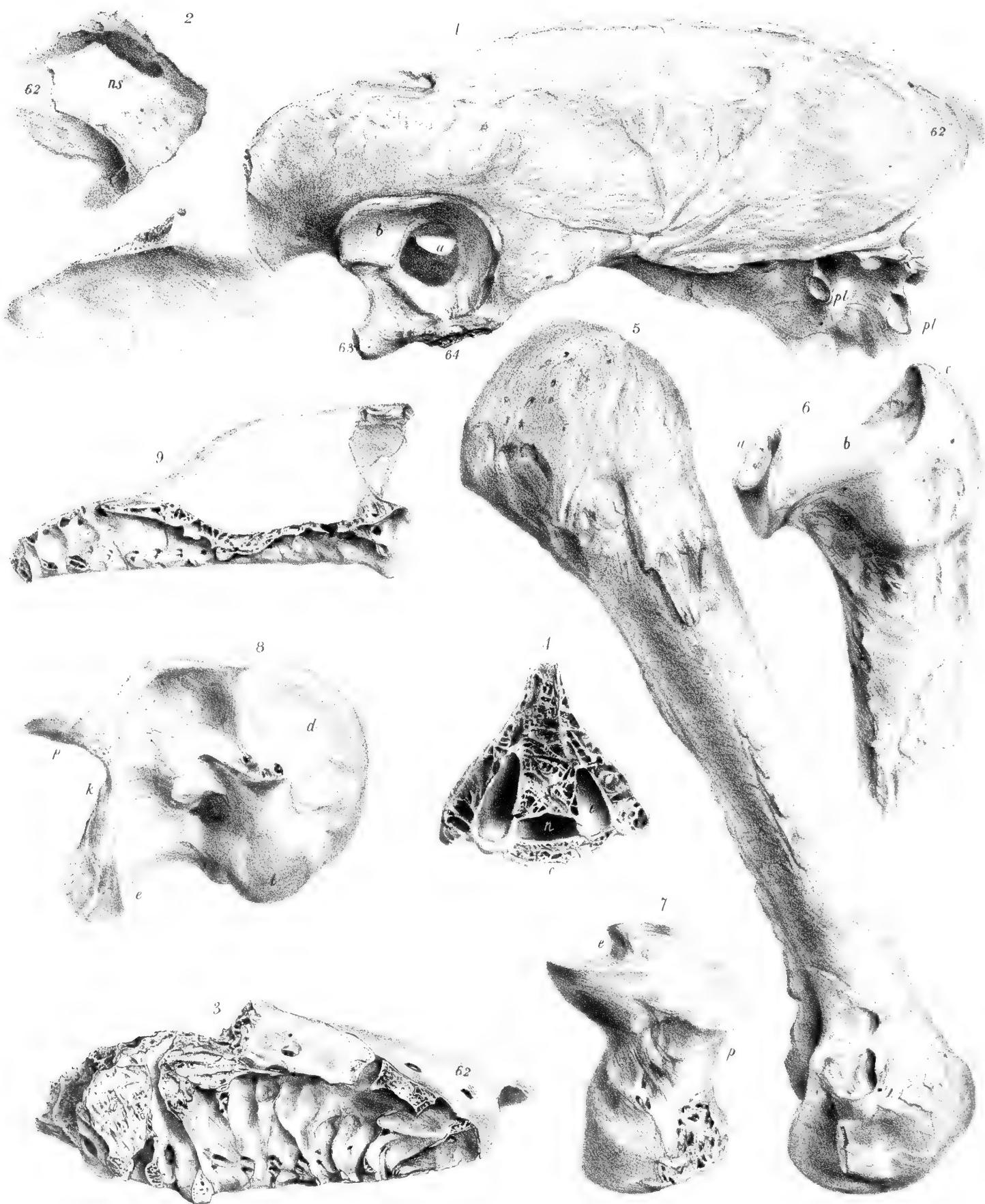


32

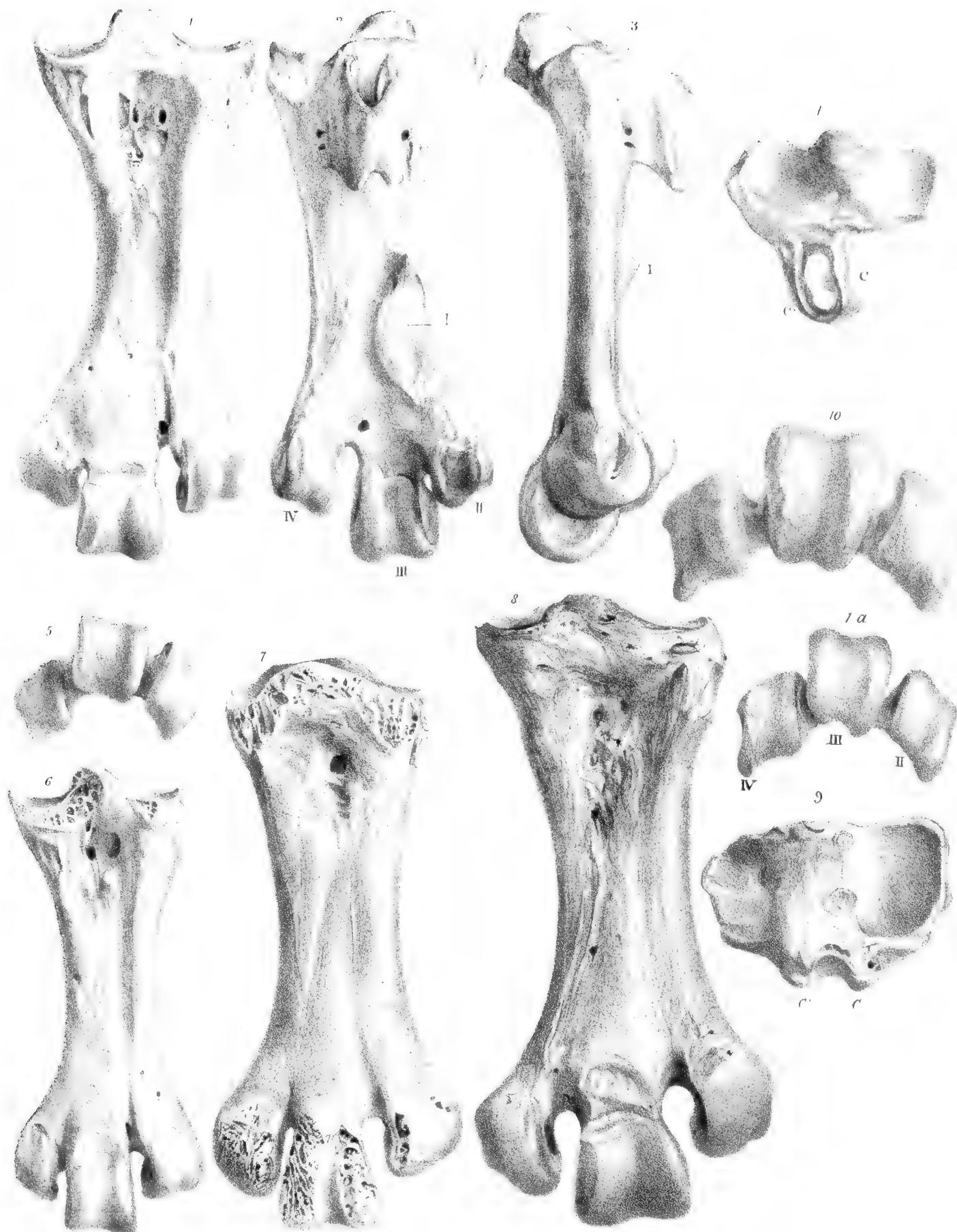


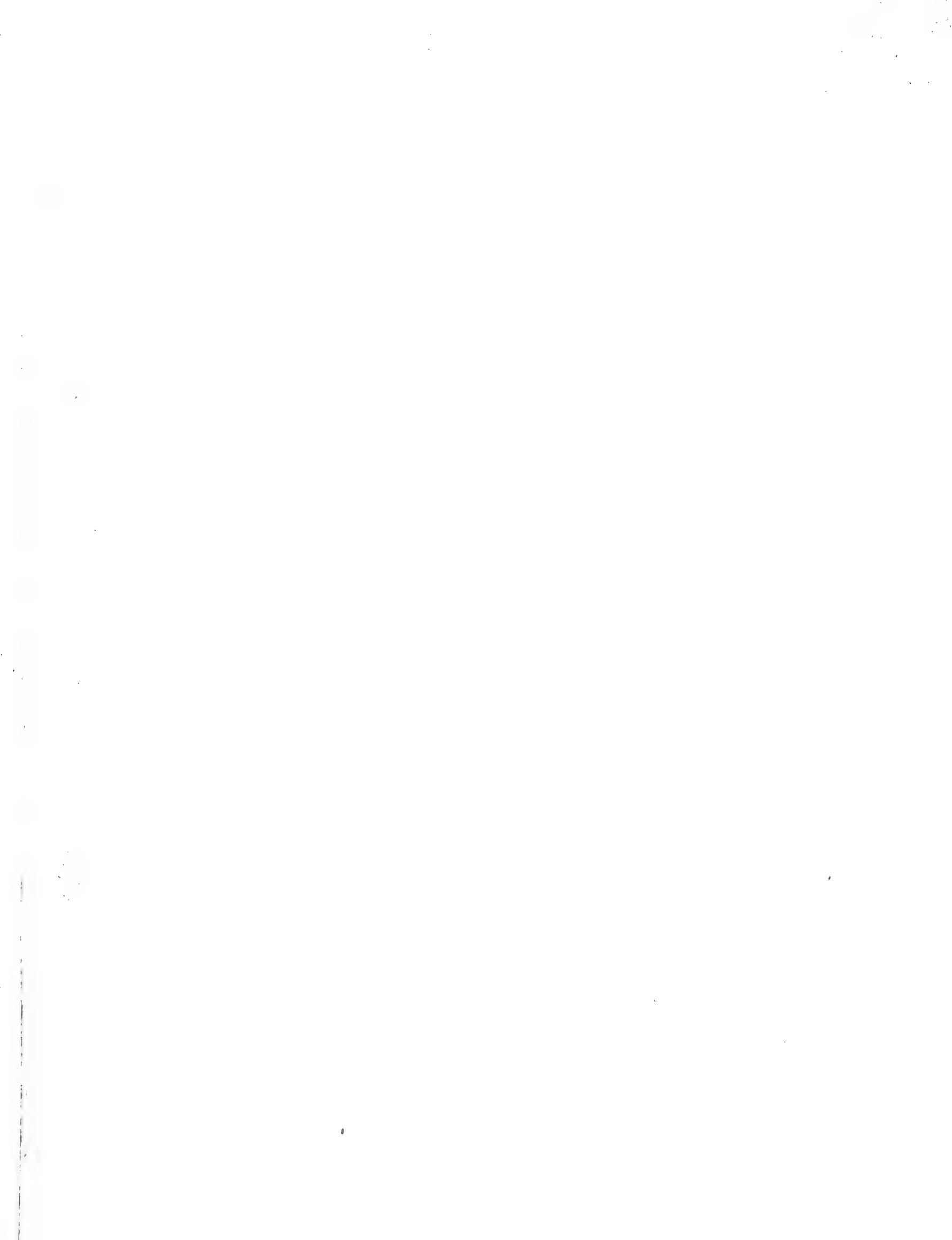


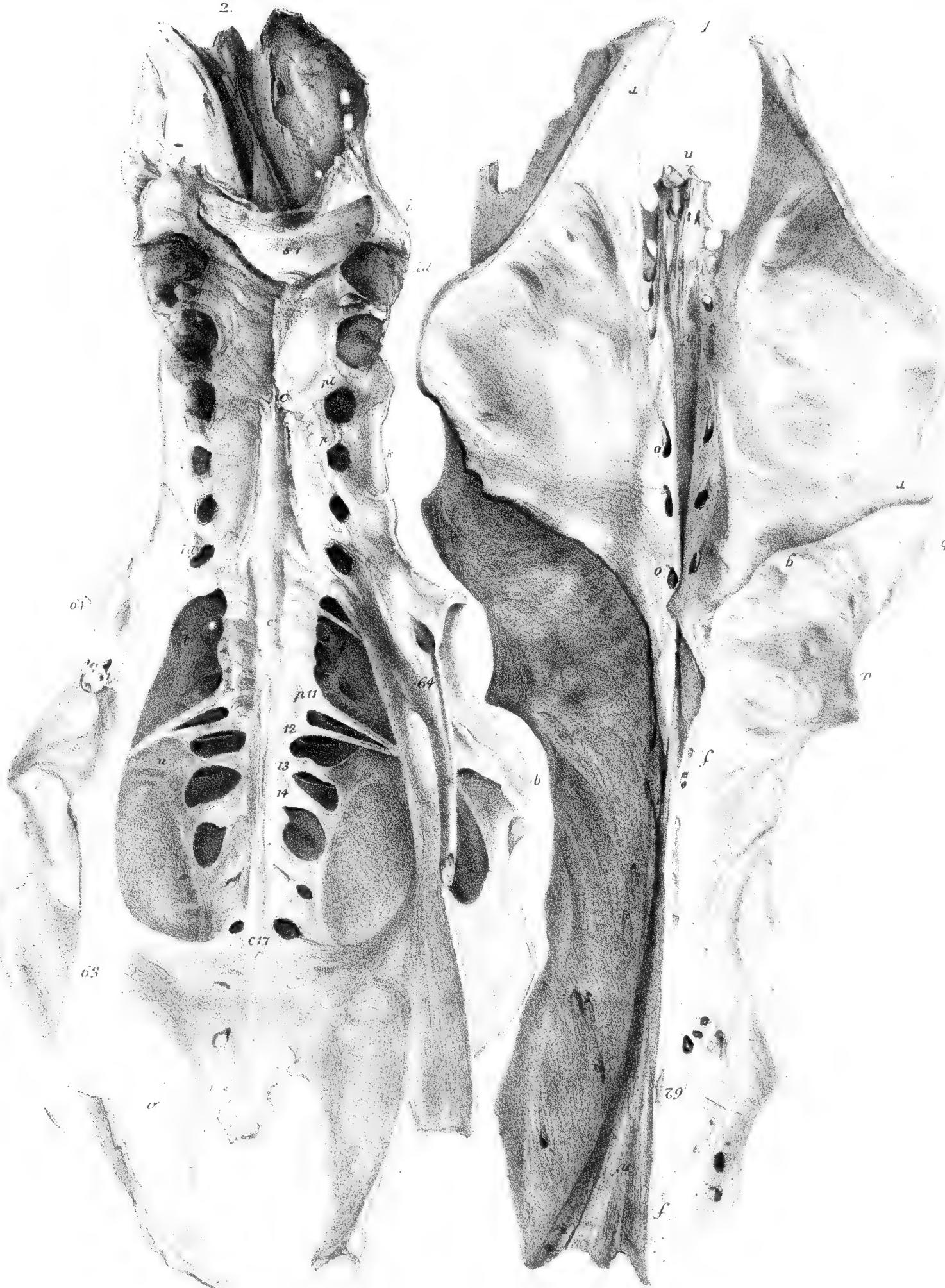


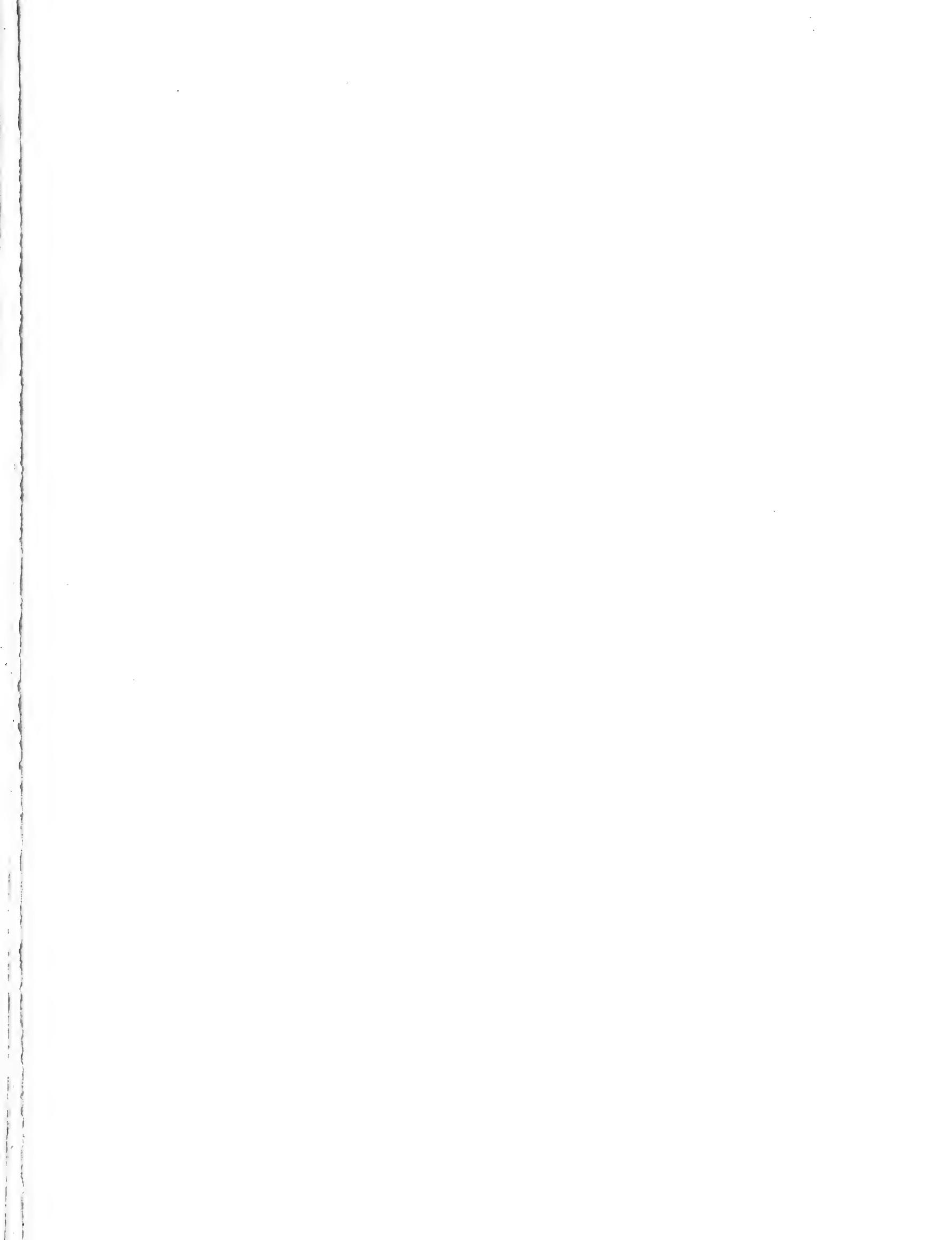


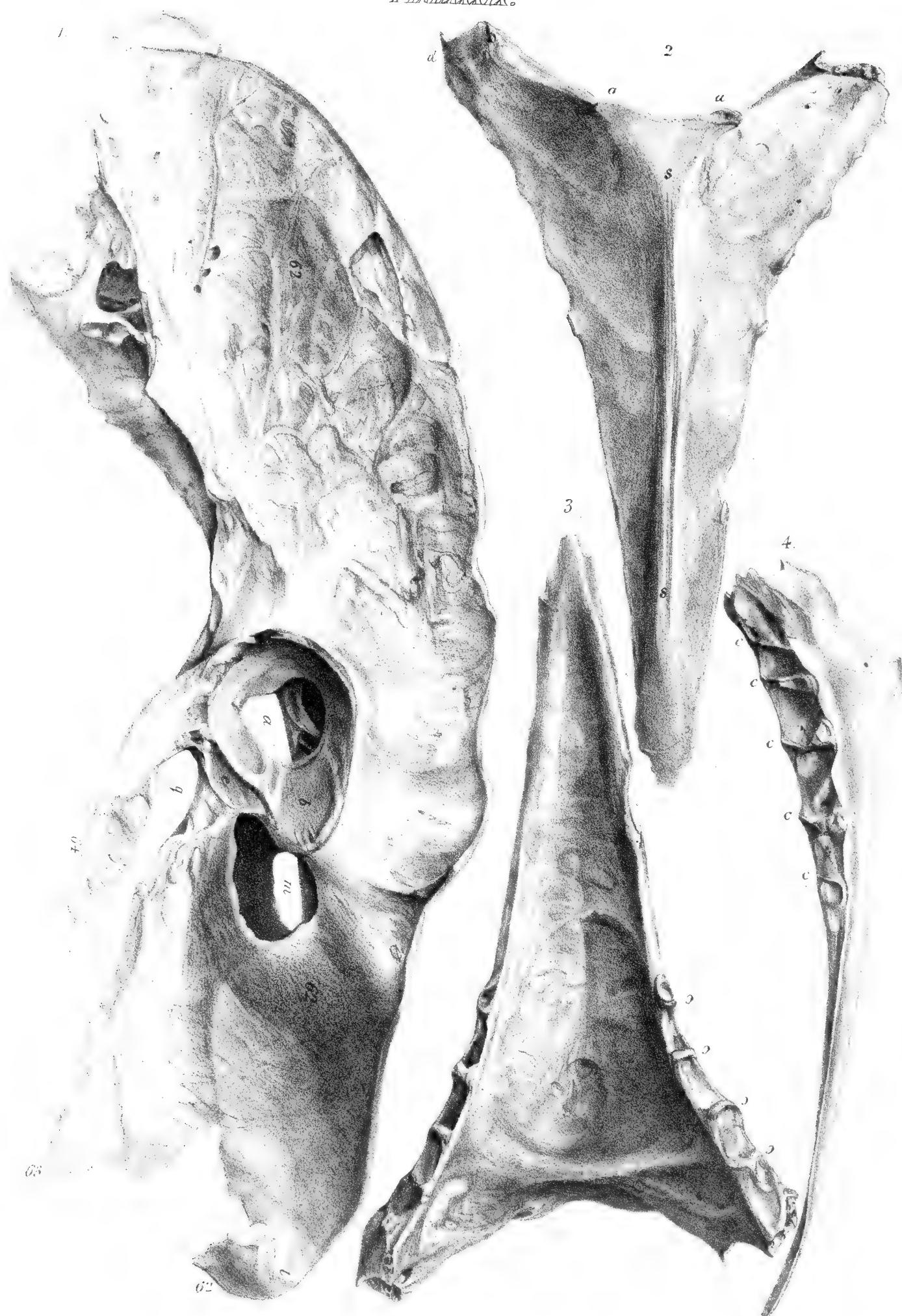


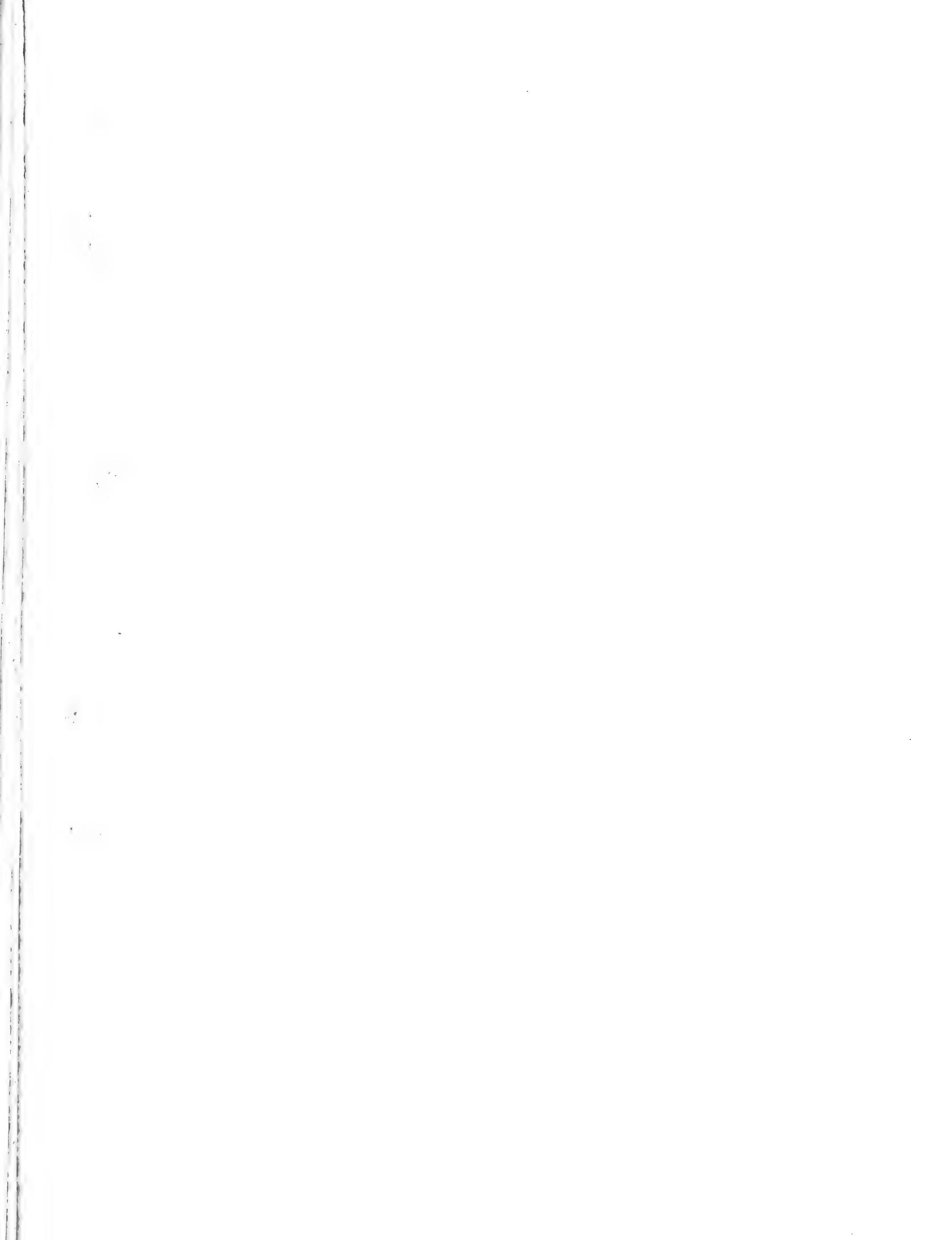


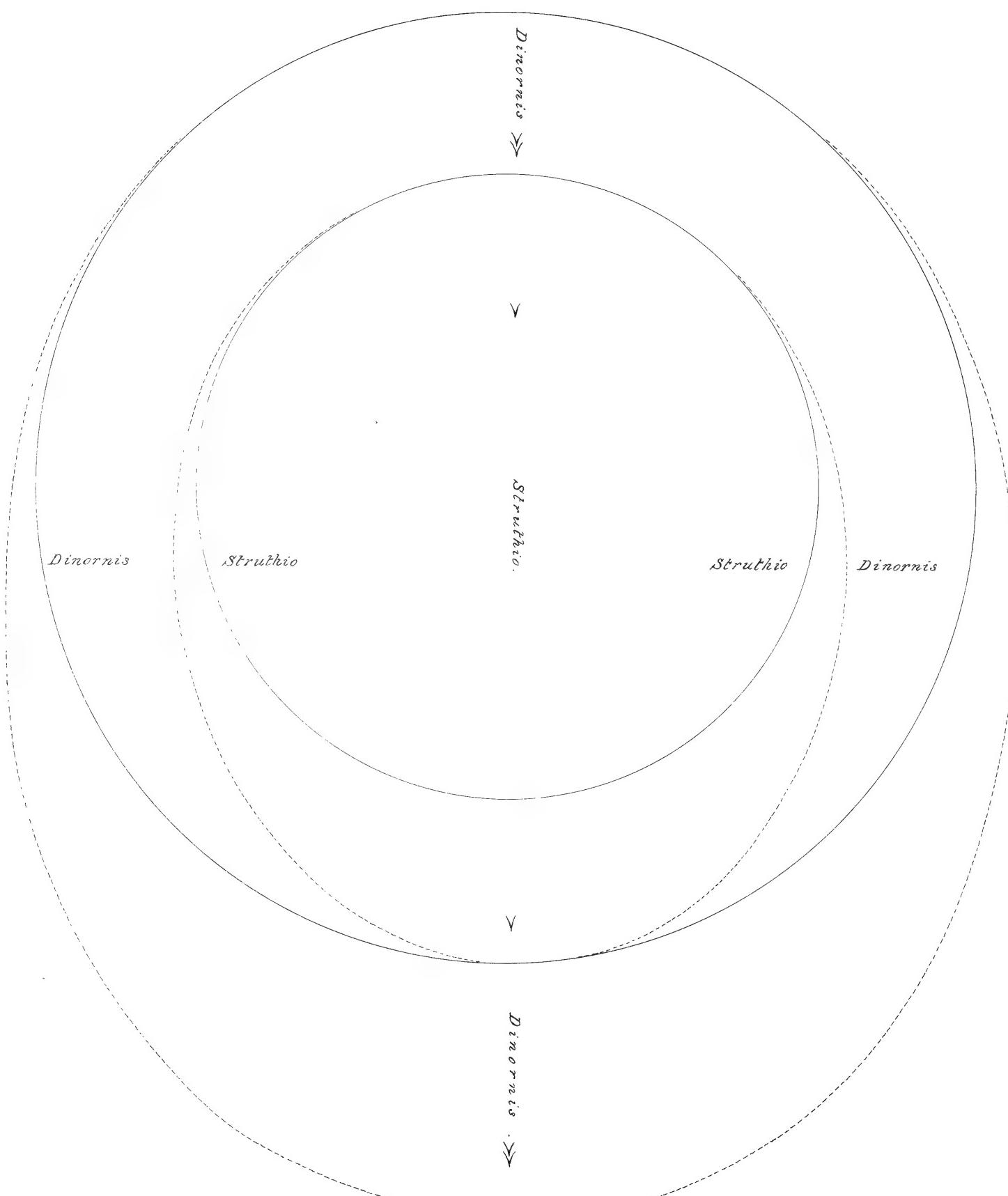




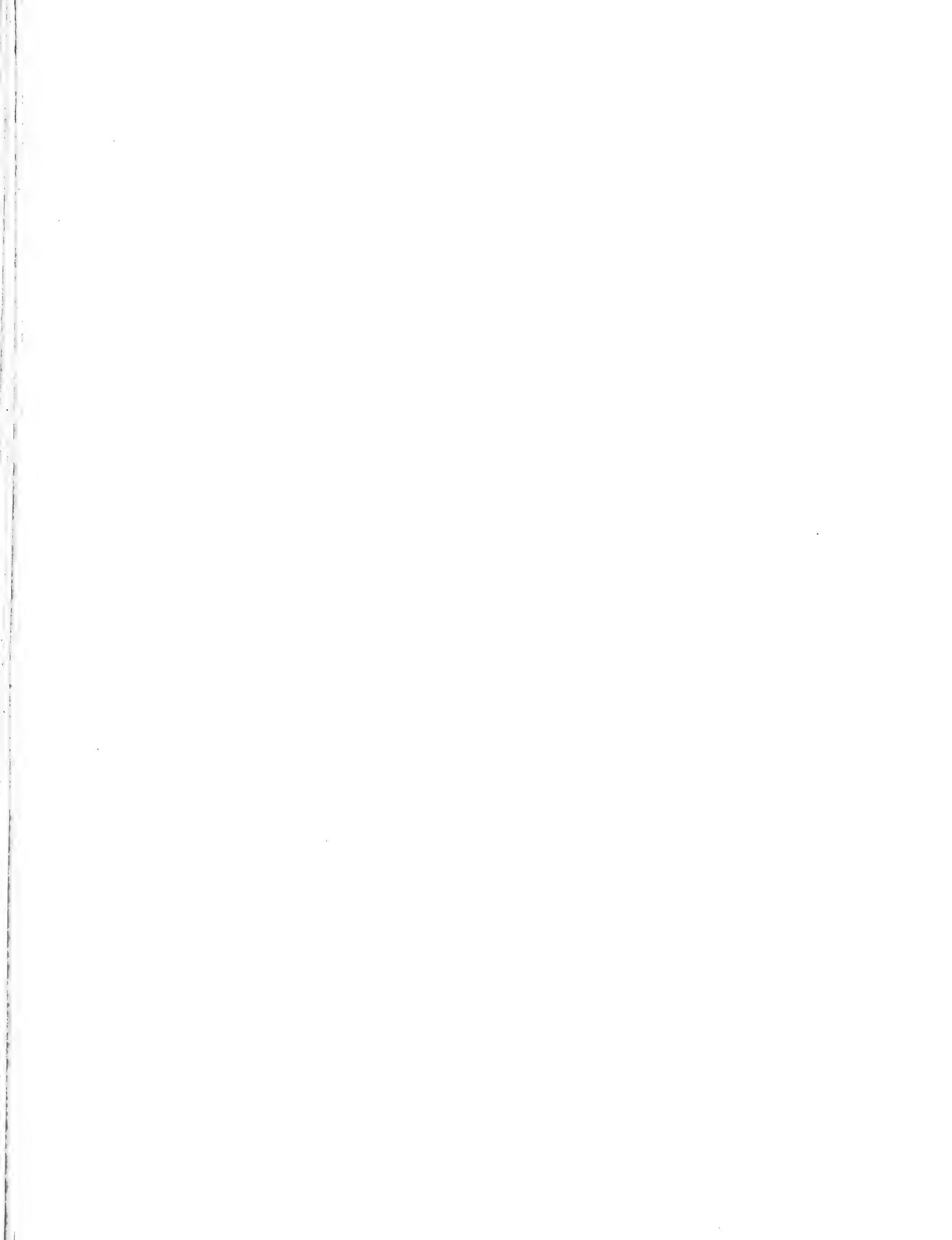




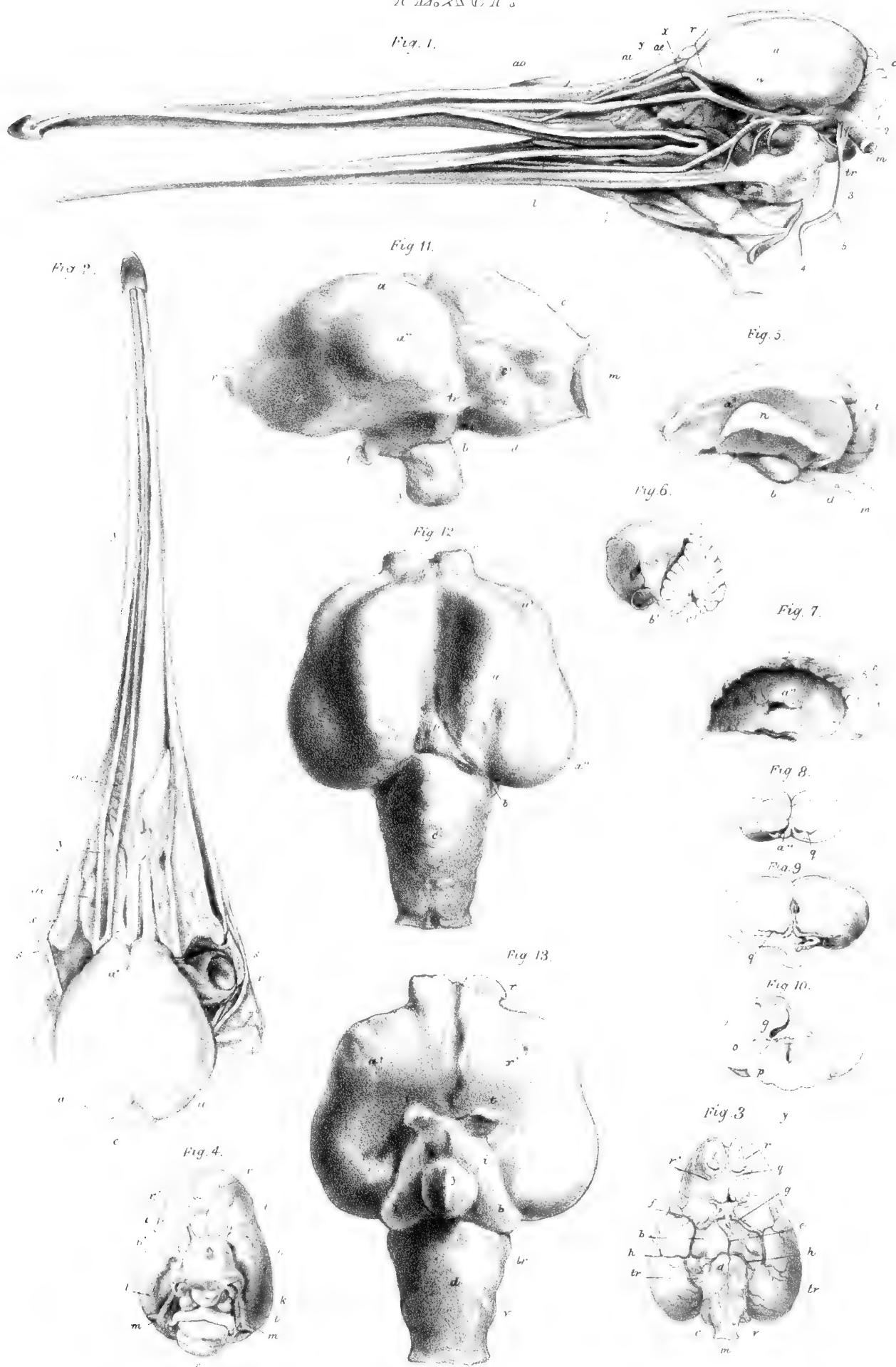




COMPARATIVE DIMENSIONS OF EGGS OF DINORNIS ELEPHANTOPUS & STRUTHIO CAMELUS.



PL. XXXIX.



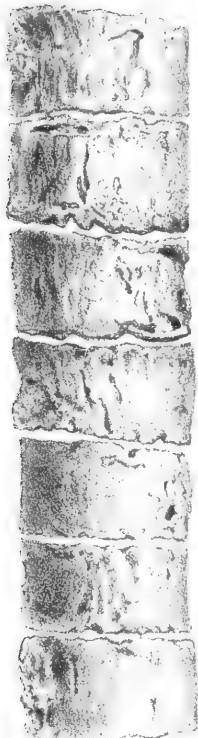
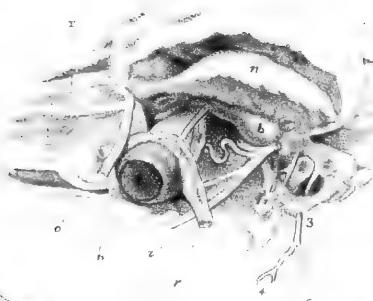


PL. XVII.

FIG. 1.

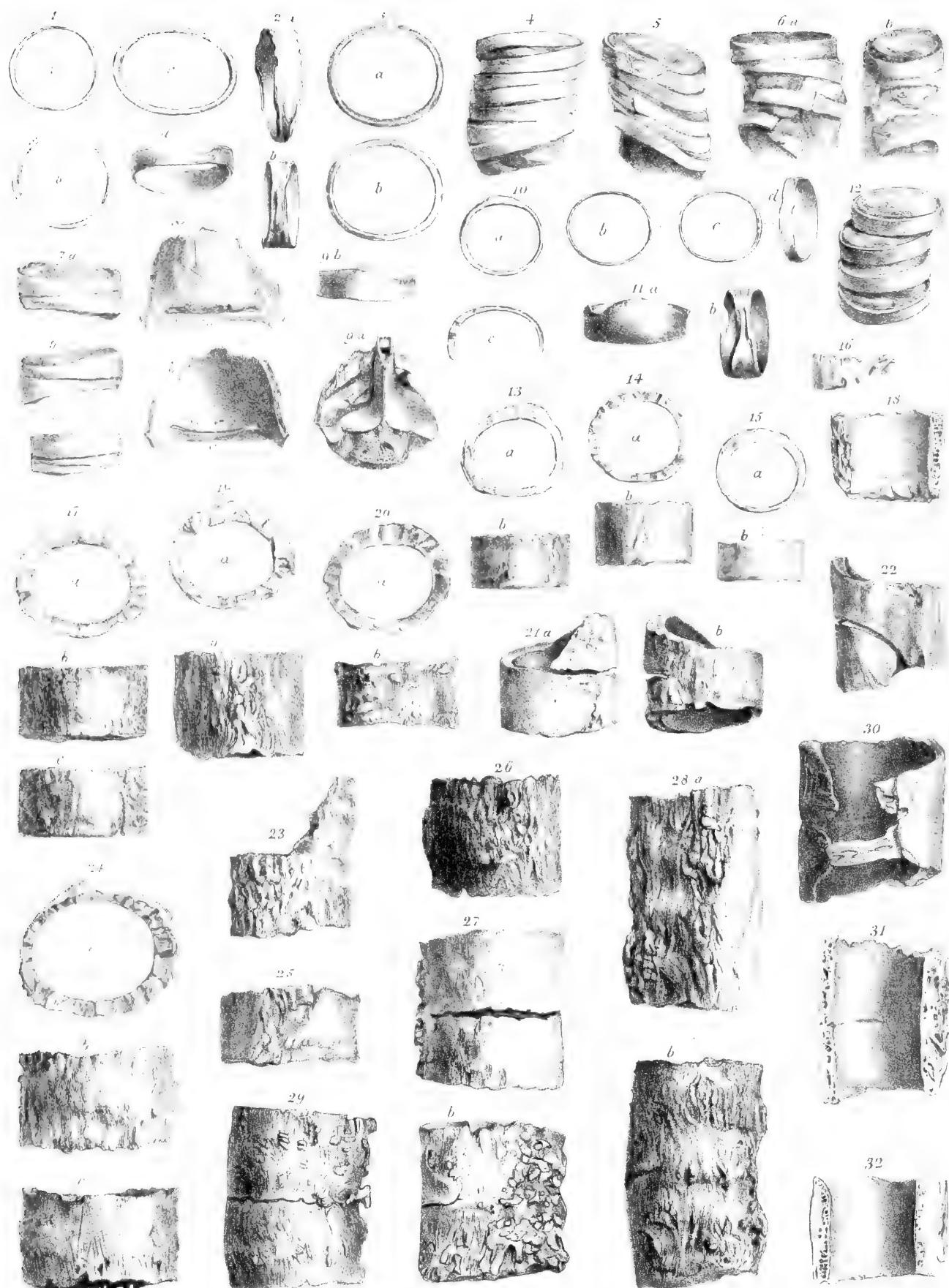


FIG. 2.





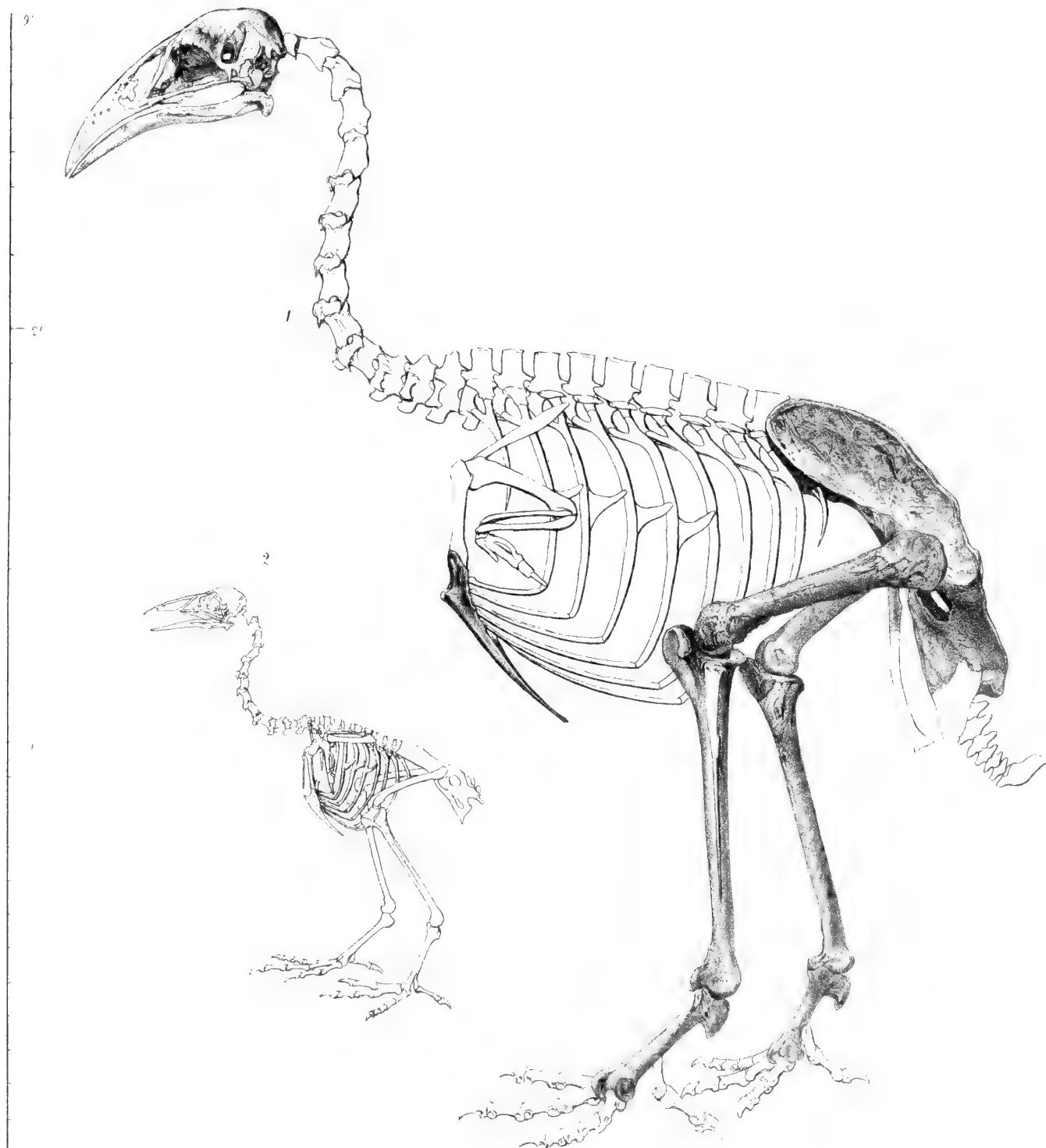
PL. XXVII.



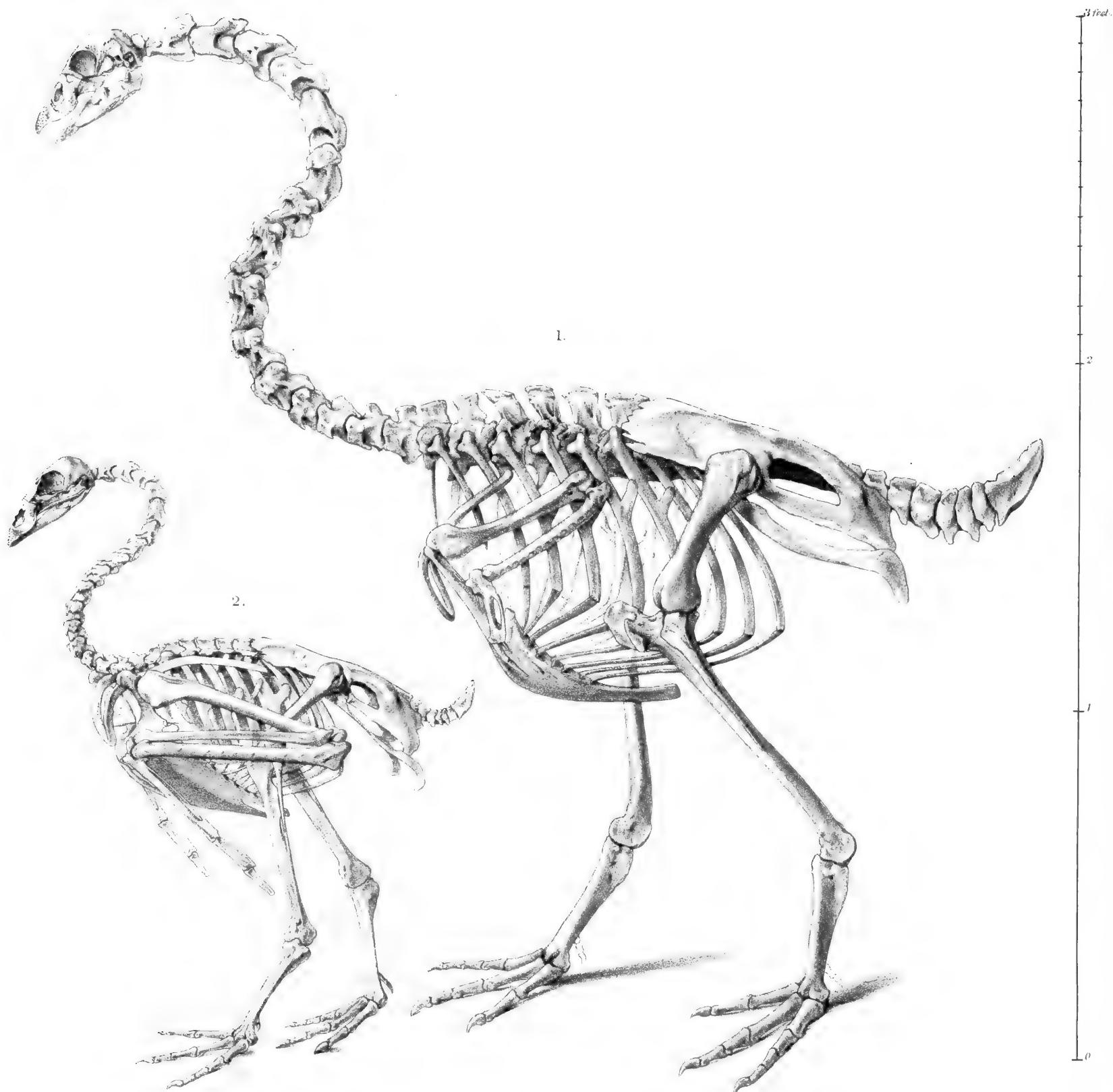
Engraving on stone by J. Bracken.

M & N. Bennett, Jun.

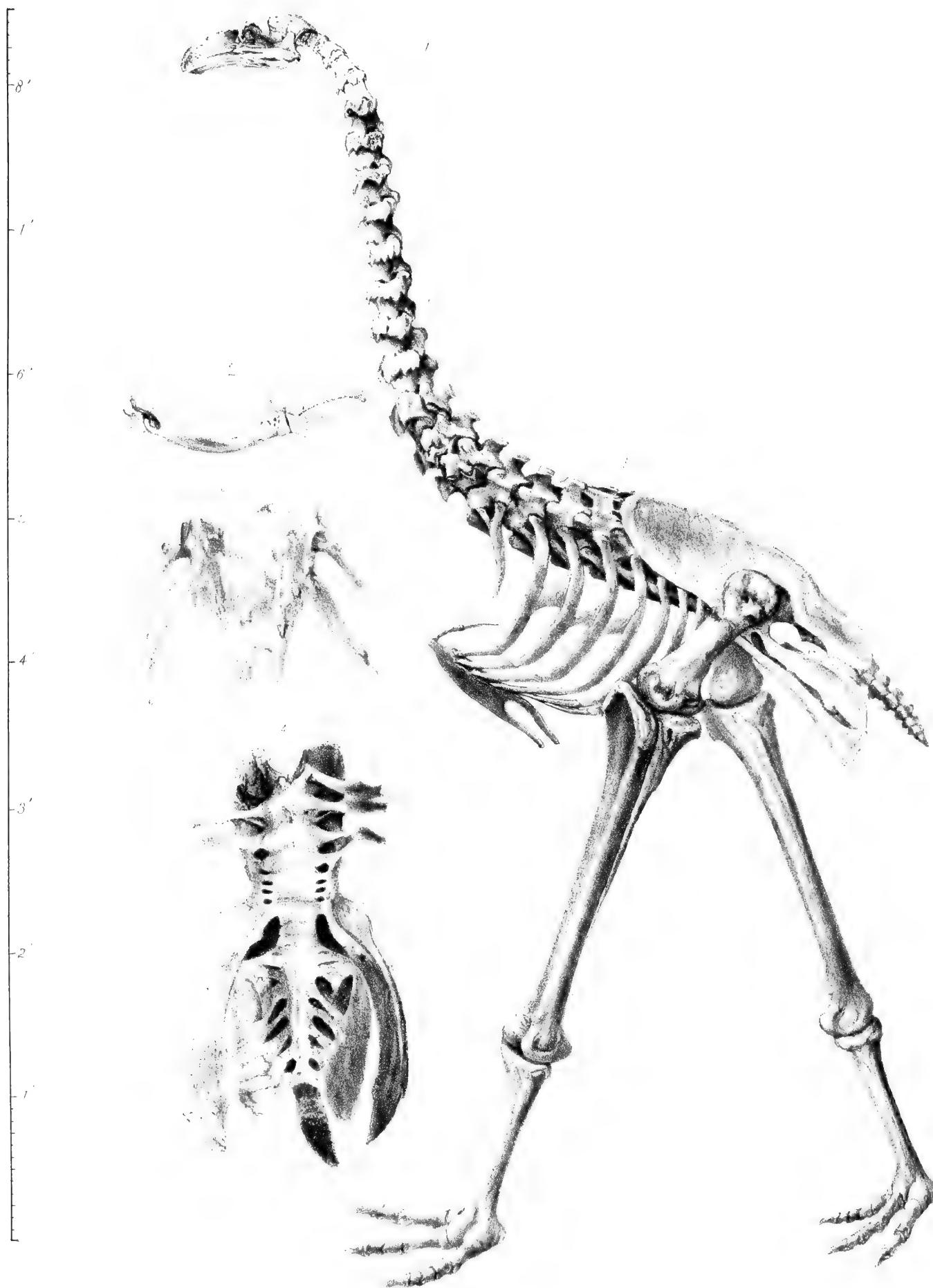
TRACHEAL RINGS. DINORNIS.











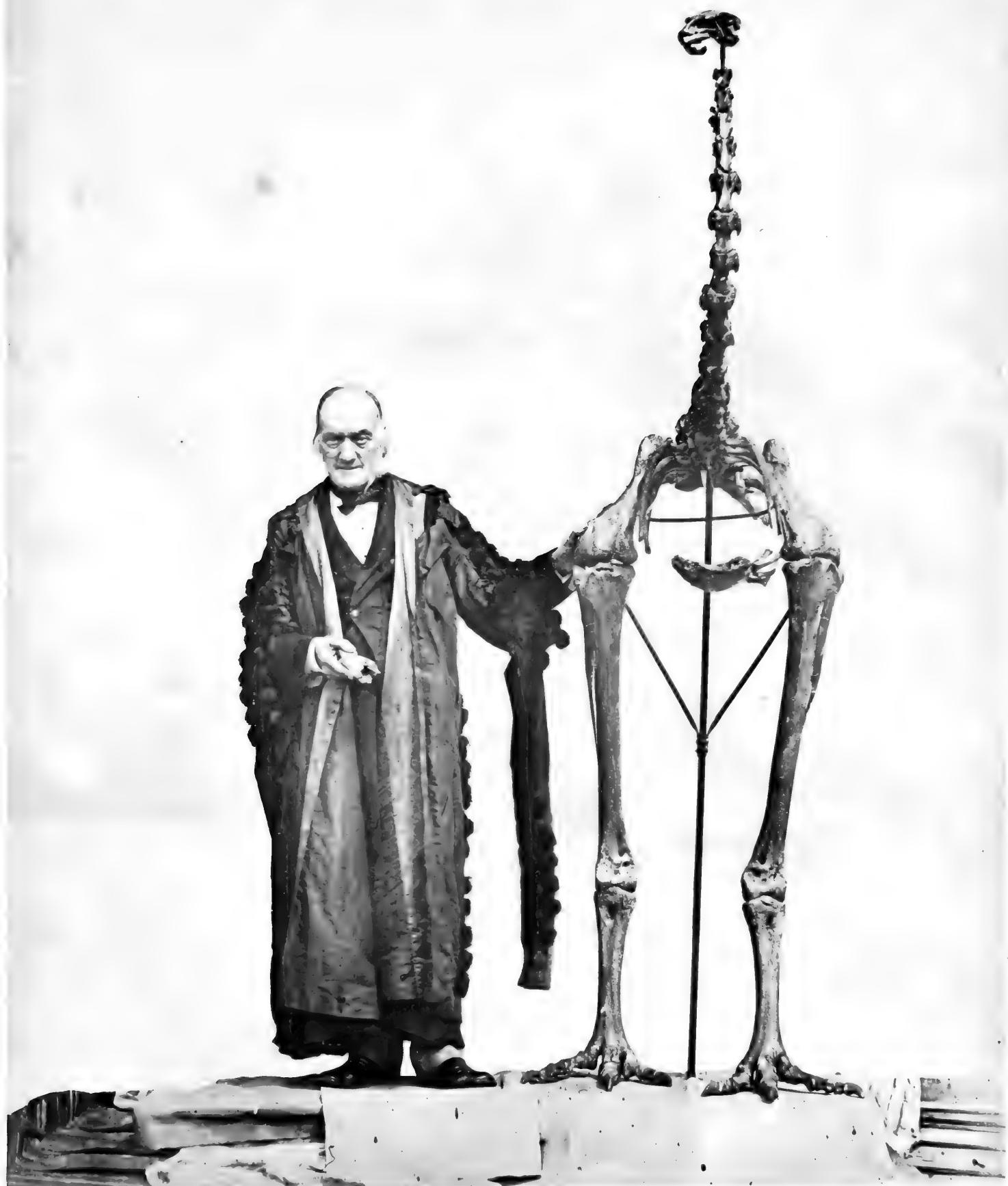
stencil del on stone by T. Exleben

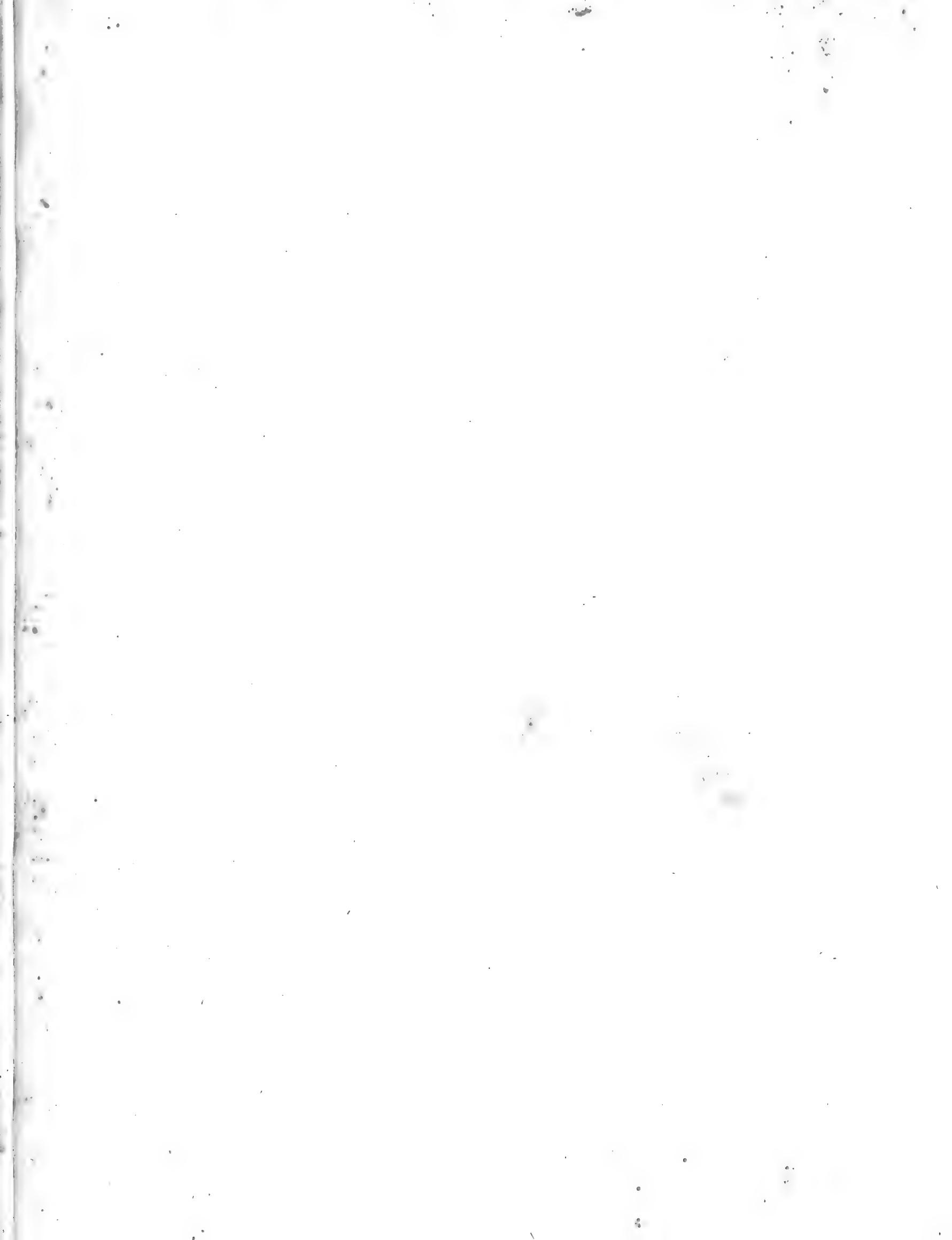
M & N Hanhart imp.

DINORHIS ROBUSTUS.



PL. XCVII.





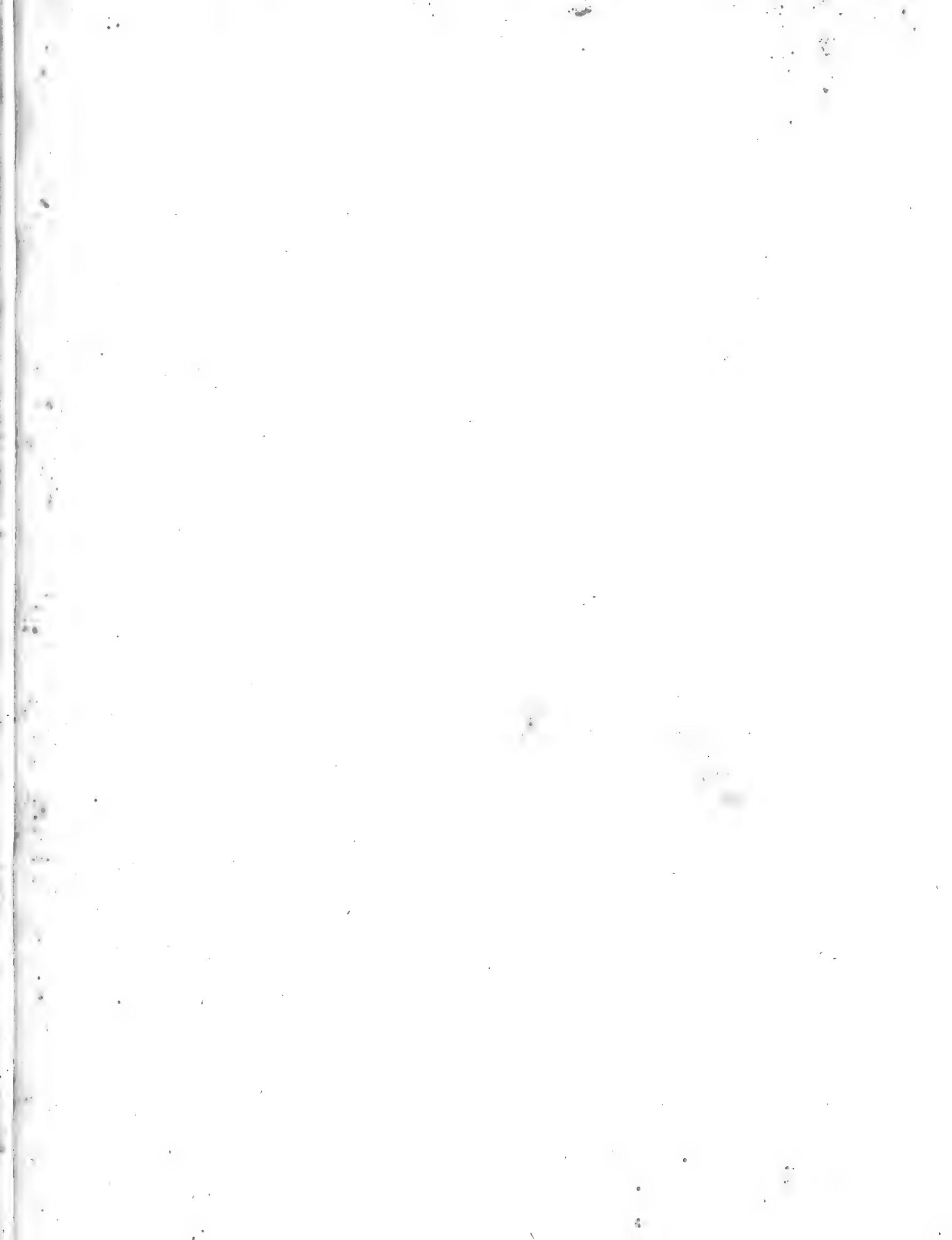


Fig. 3.



Fig. 1.



Fig. 4.



Fig. 2.

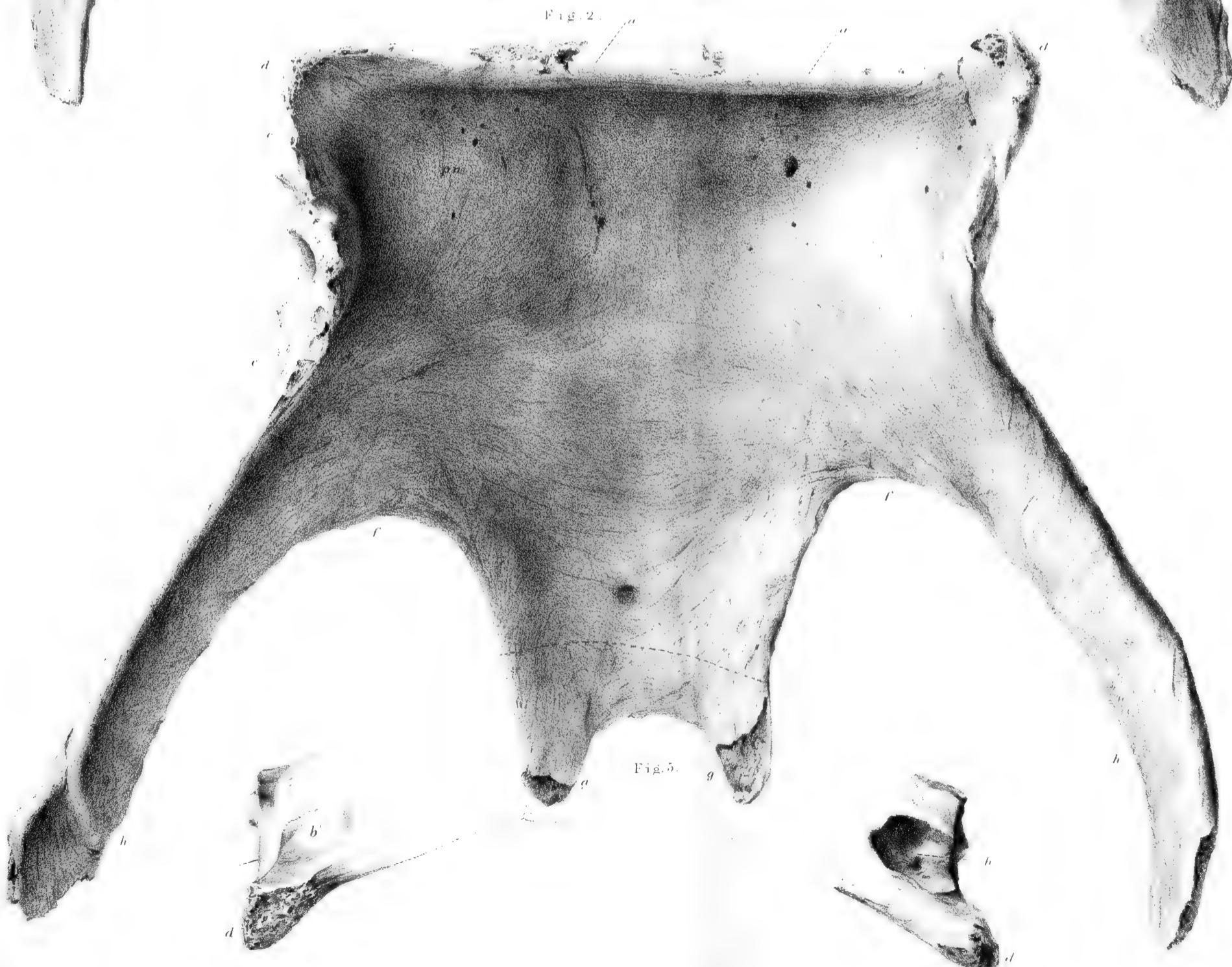
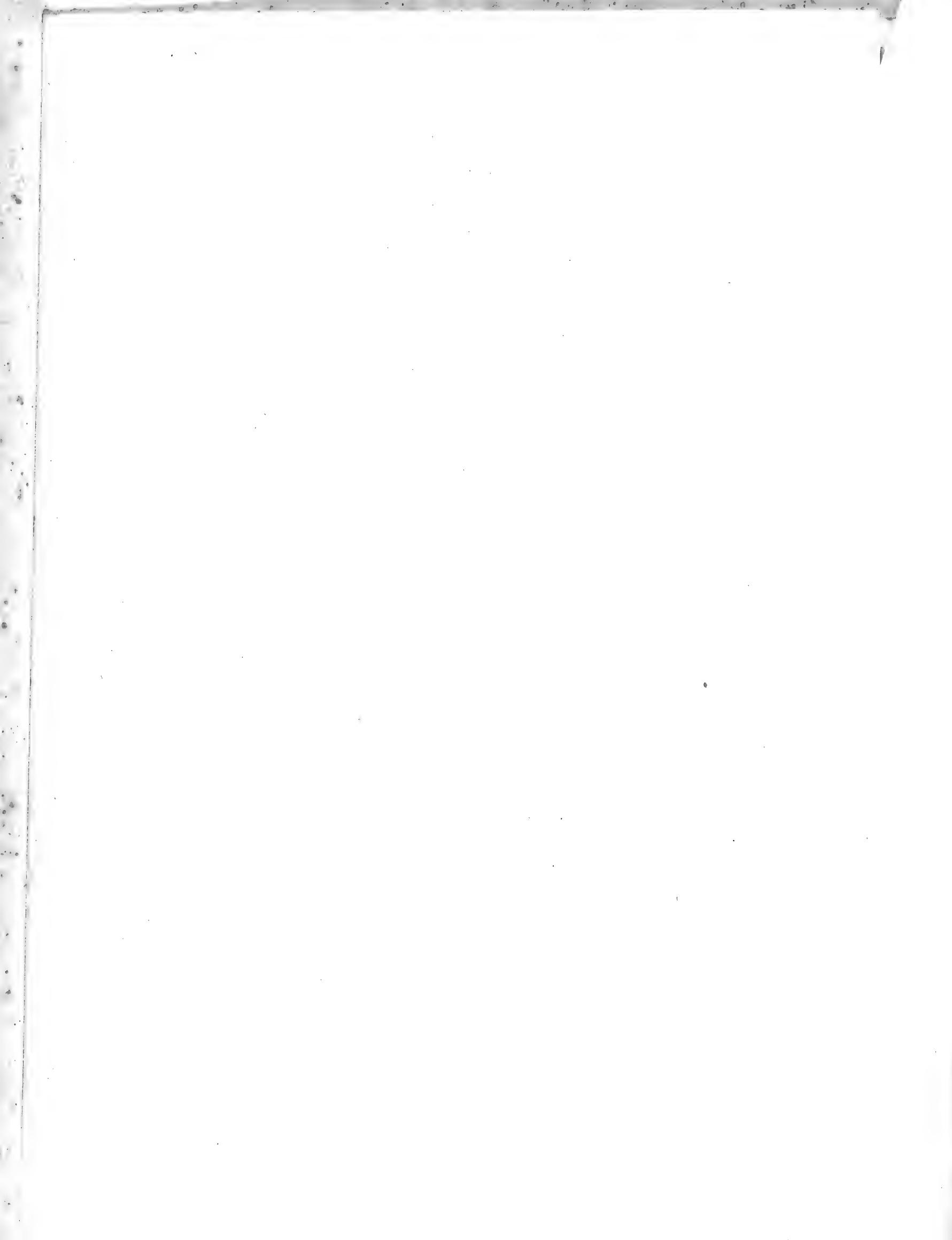
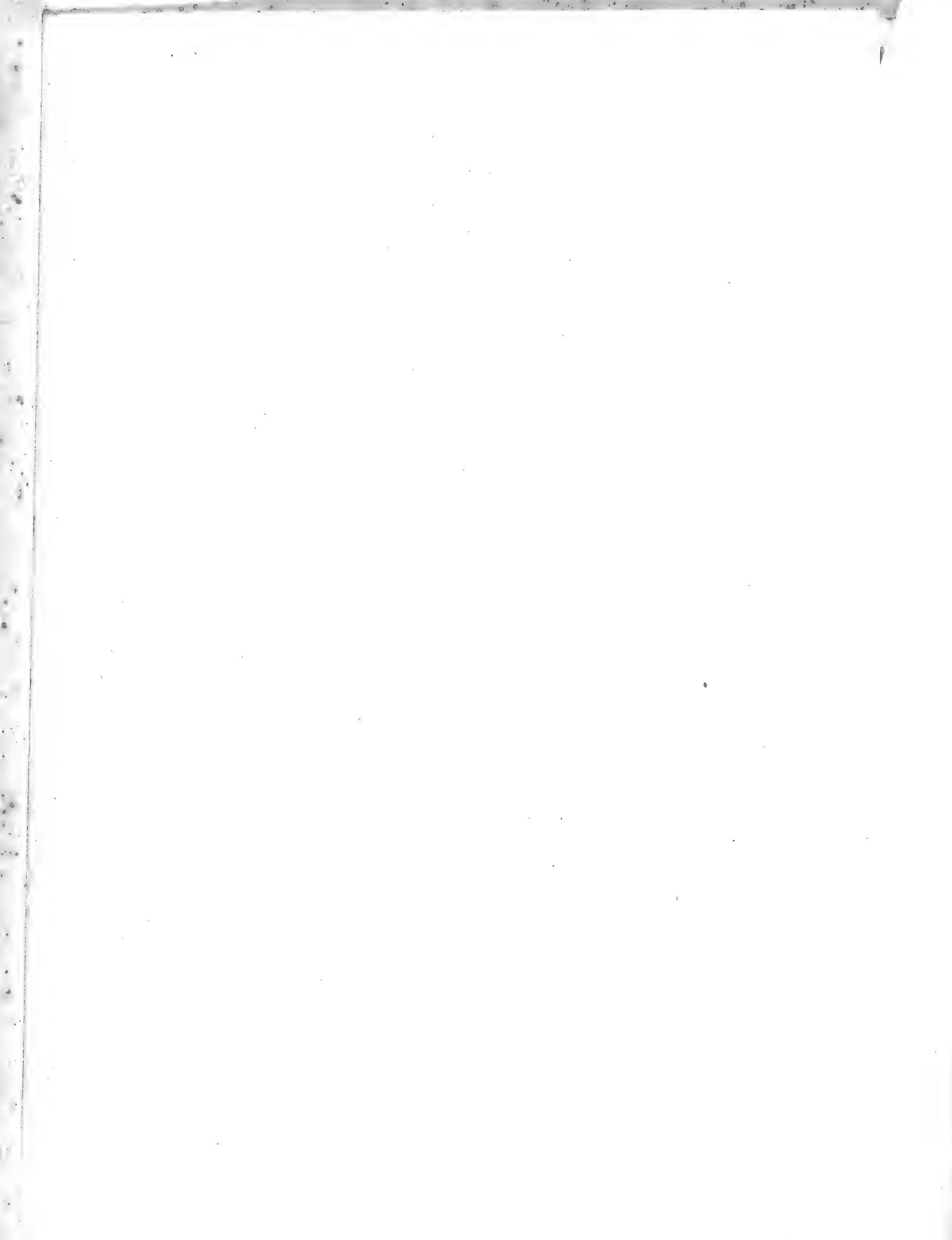
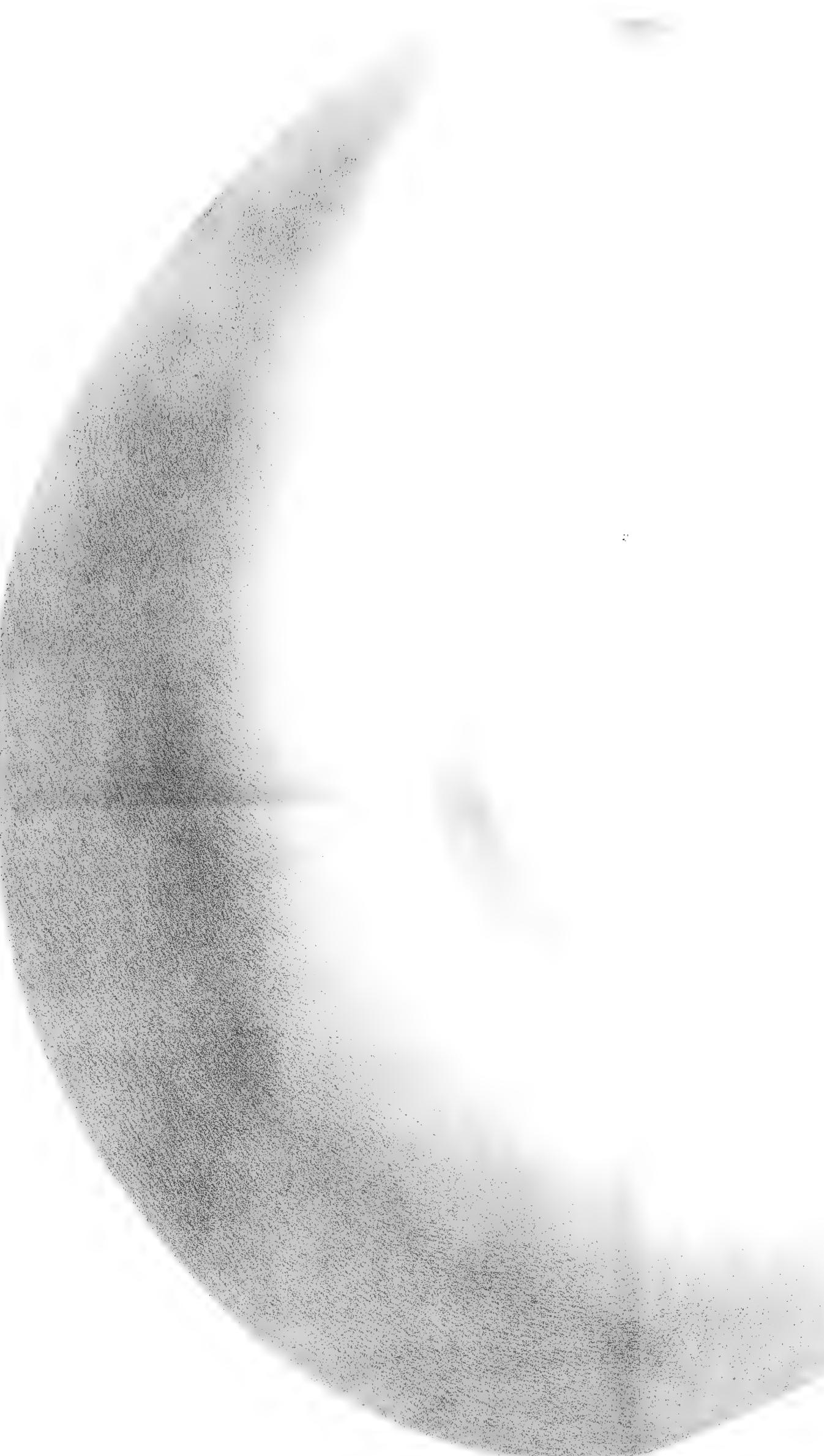


Fig. 5.





2000, XIZI

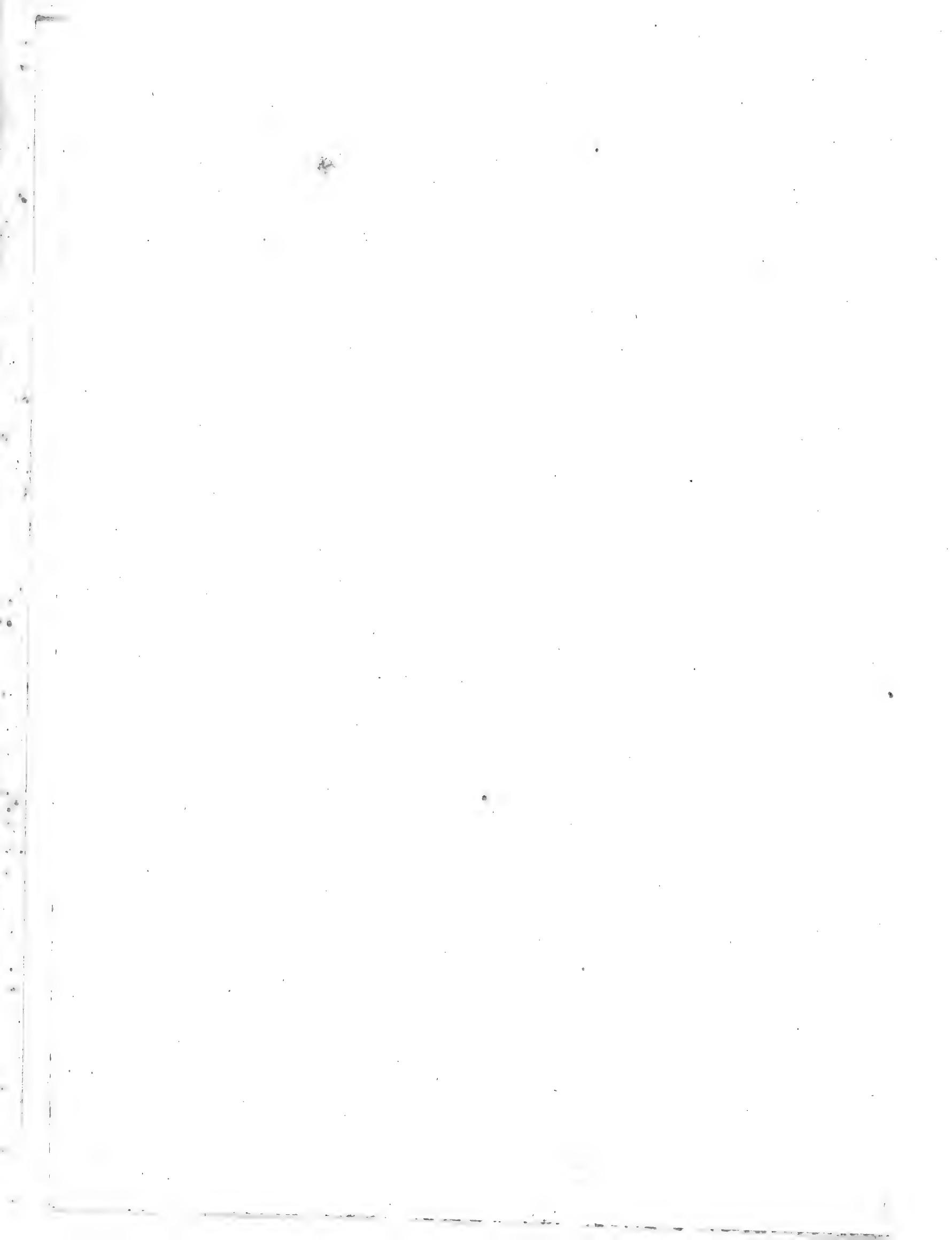


2000, XIZI

FIG. OF EPOONIC MAXIMA

FIG. OF APIE + 3 ALTEMA

2000, XIZI



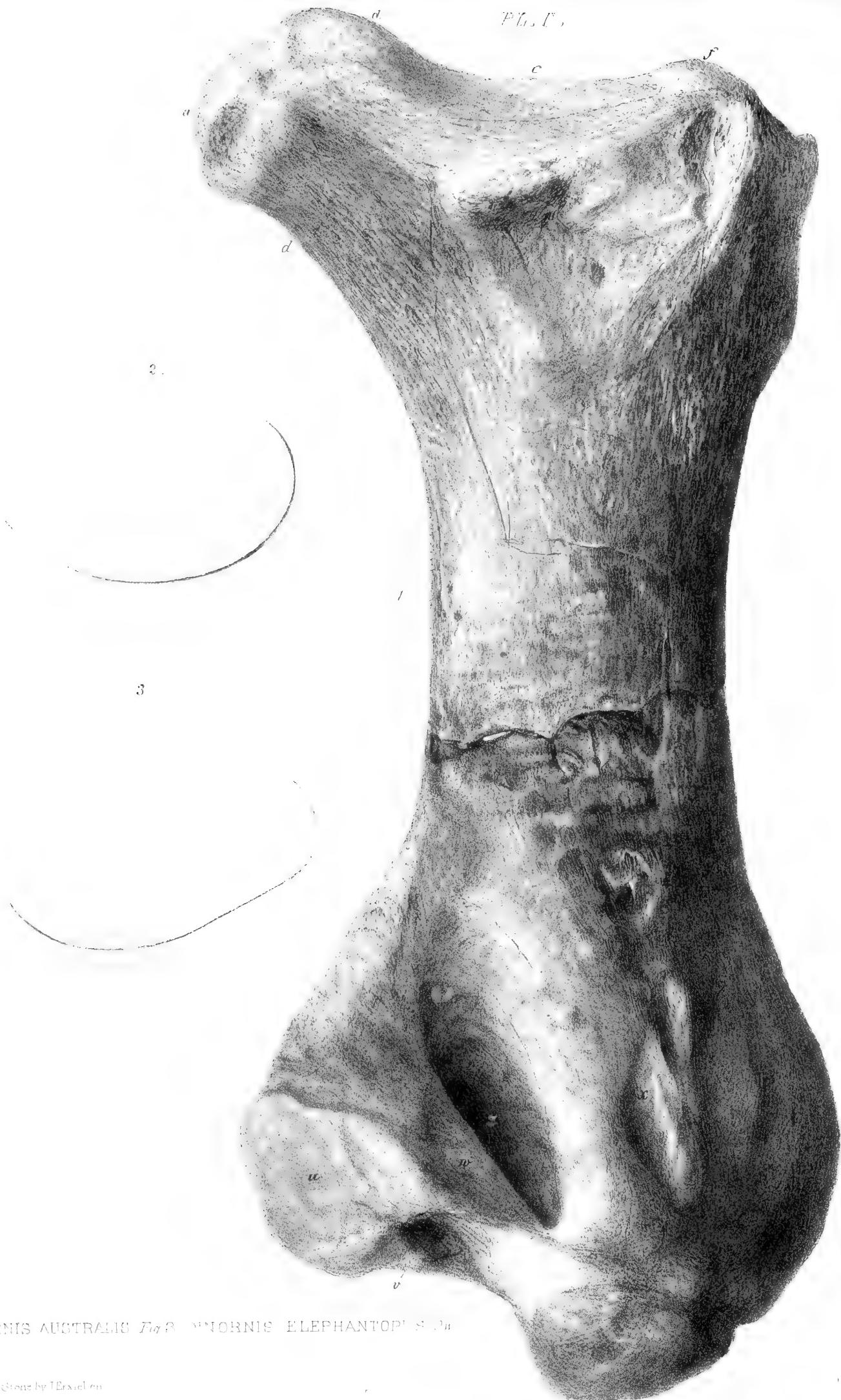
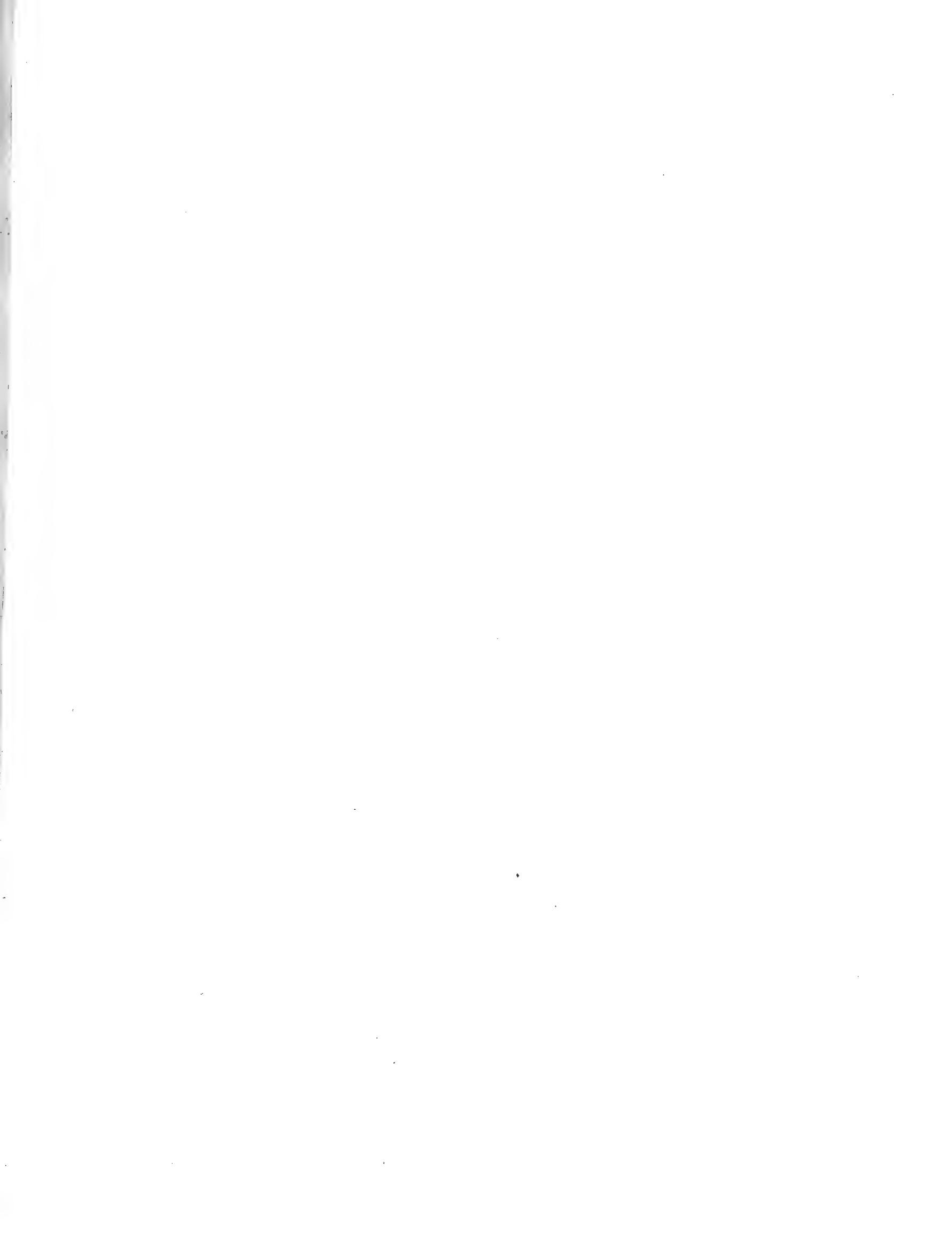
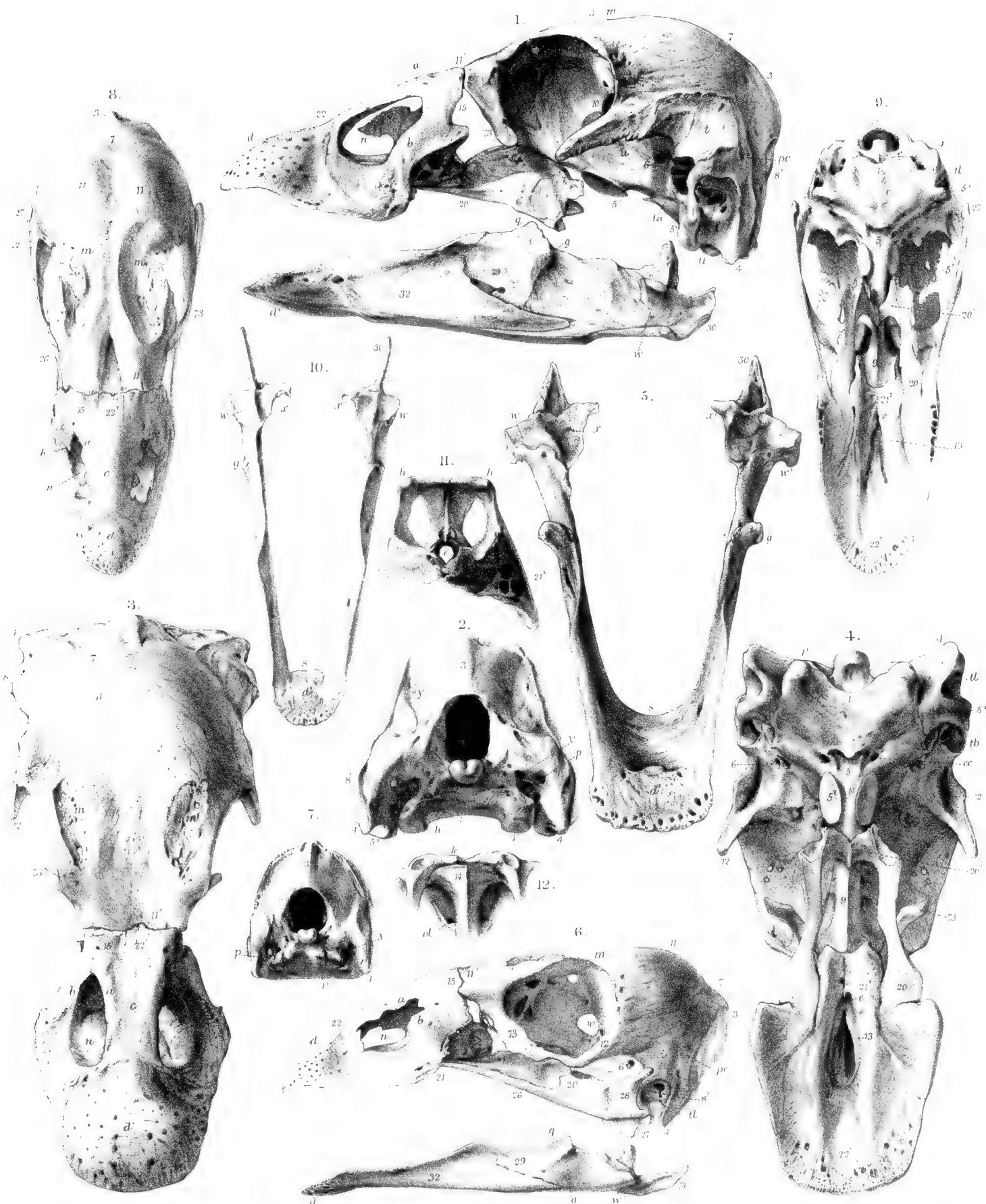


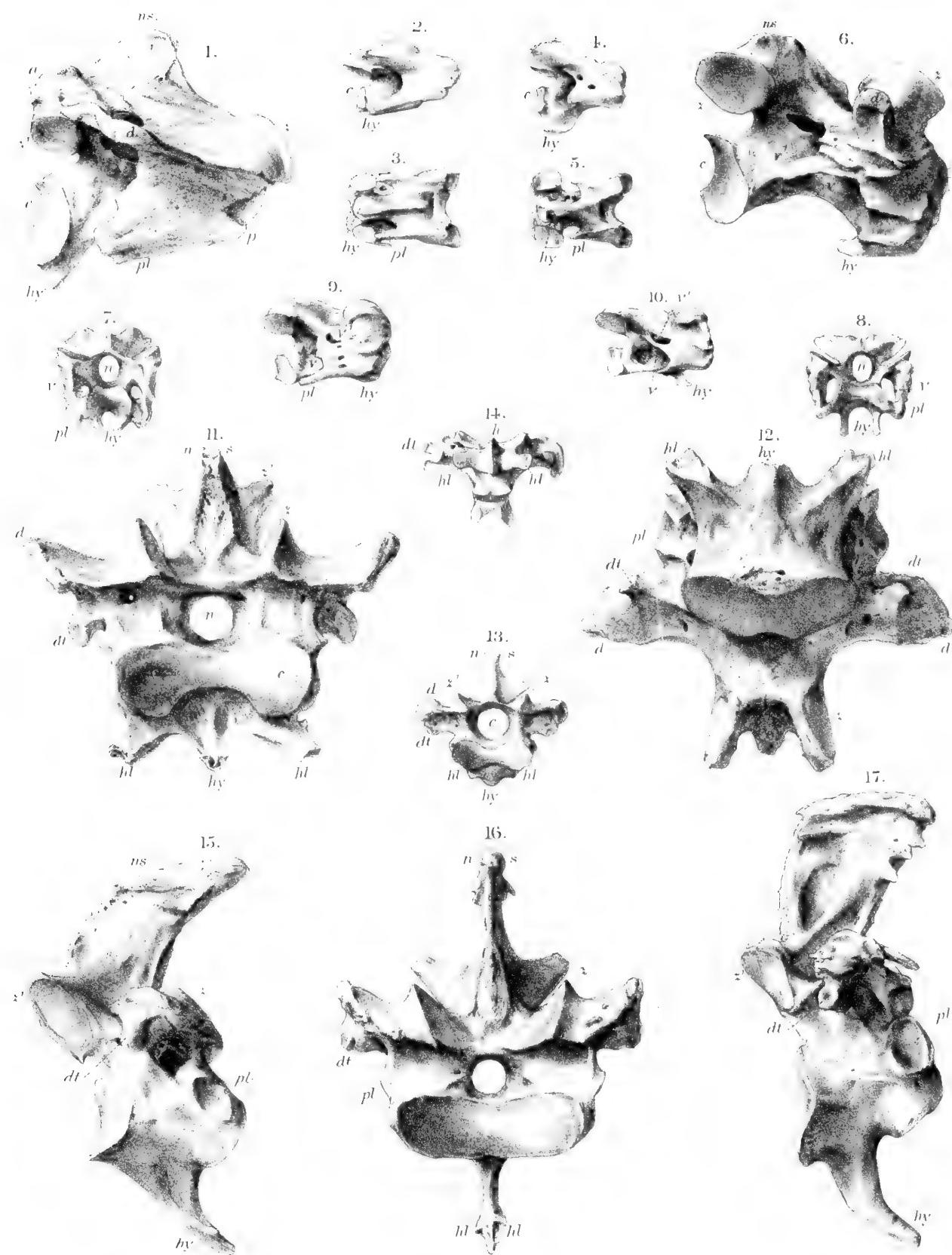
PLATE II. FIG. 2. "MORNING ELEPHANTOP" SKULL







PAL. C. T.



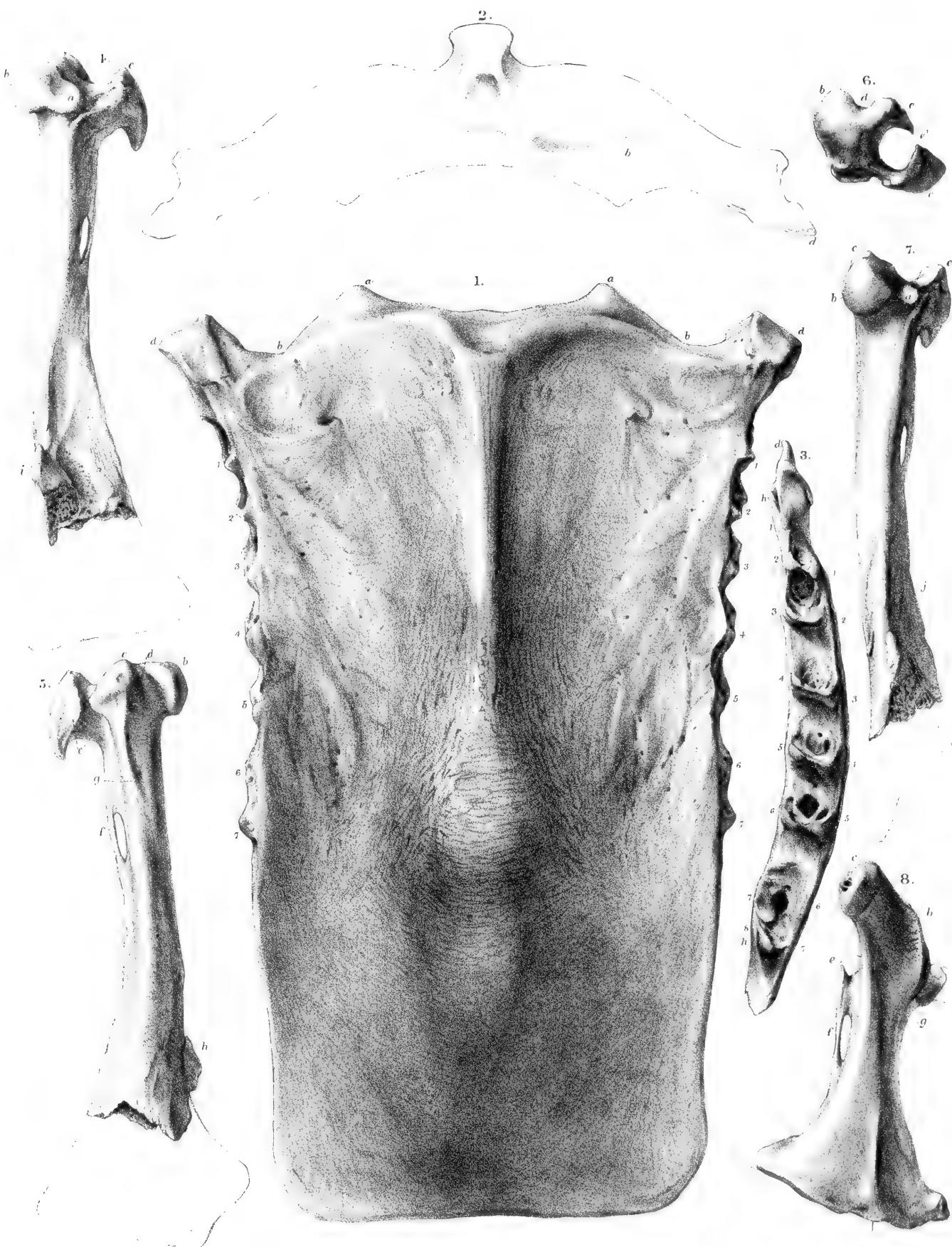
R. O. del Griesbach lith.

Mintern Bros. Imp.

Figs. 1 6. 11. 12. 15. 16. 17. CNEMIORNIS; 2 3. 7. 9. 13. CEREOPSIS; 4. 5. 8. 10. 14. TACHYERES.



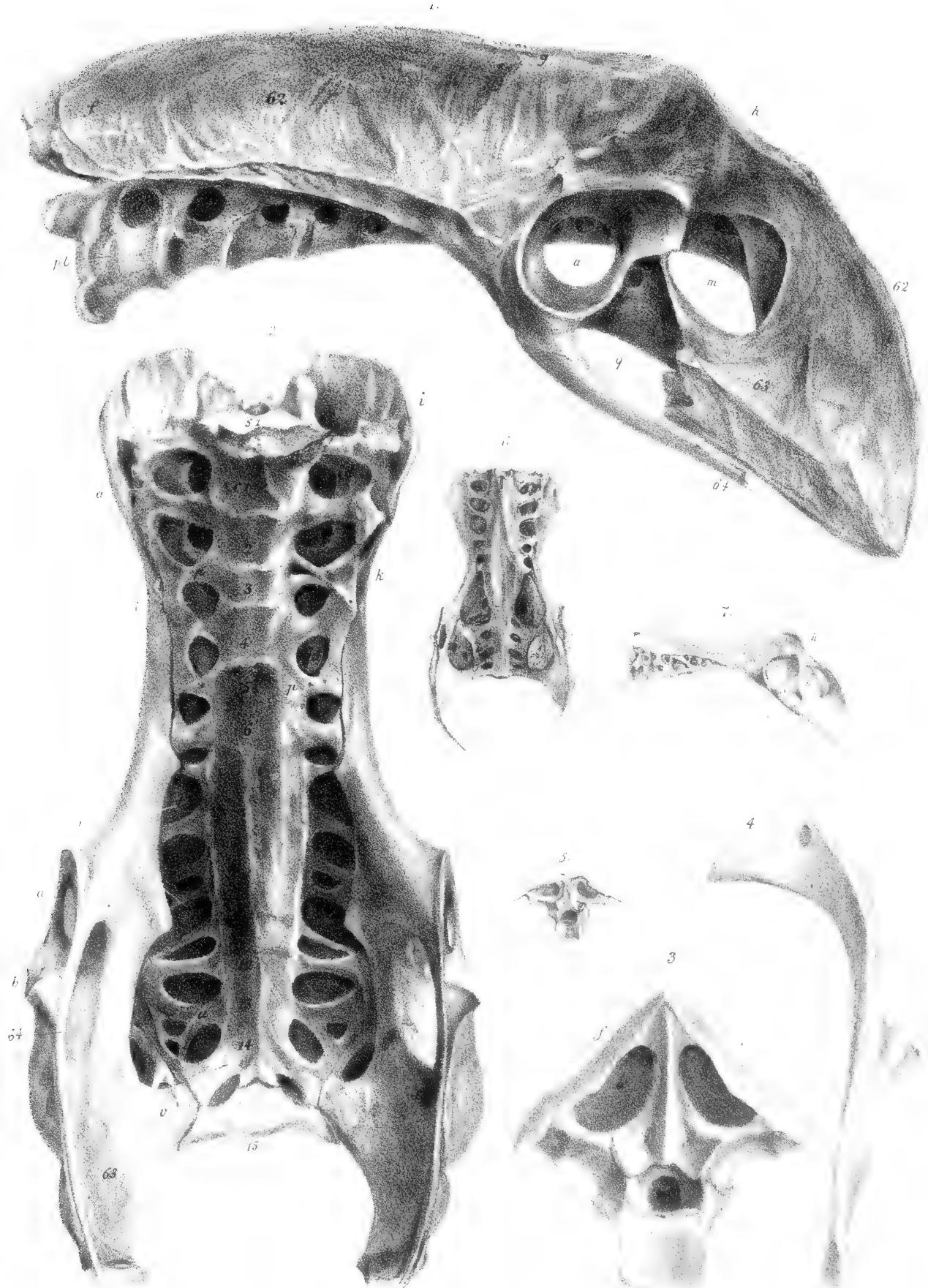
PL. CIII.





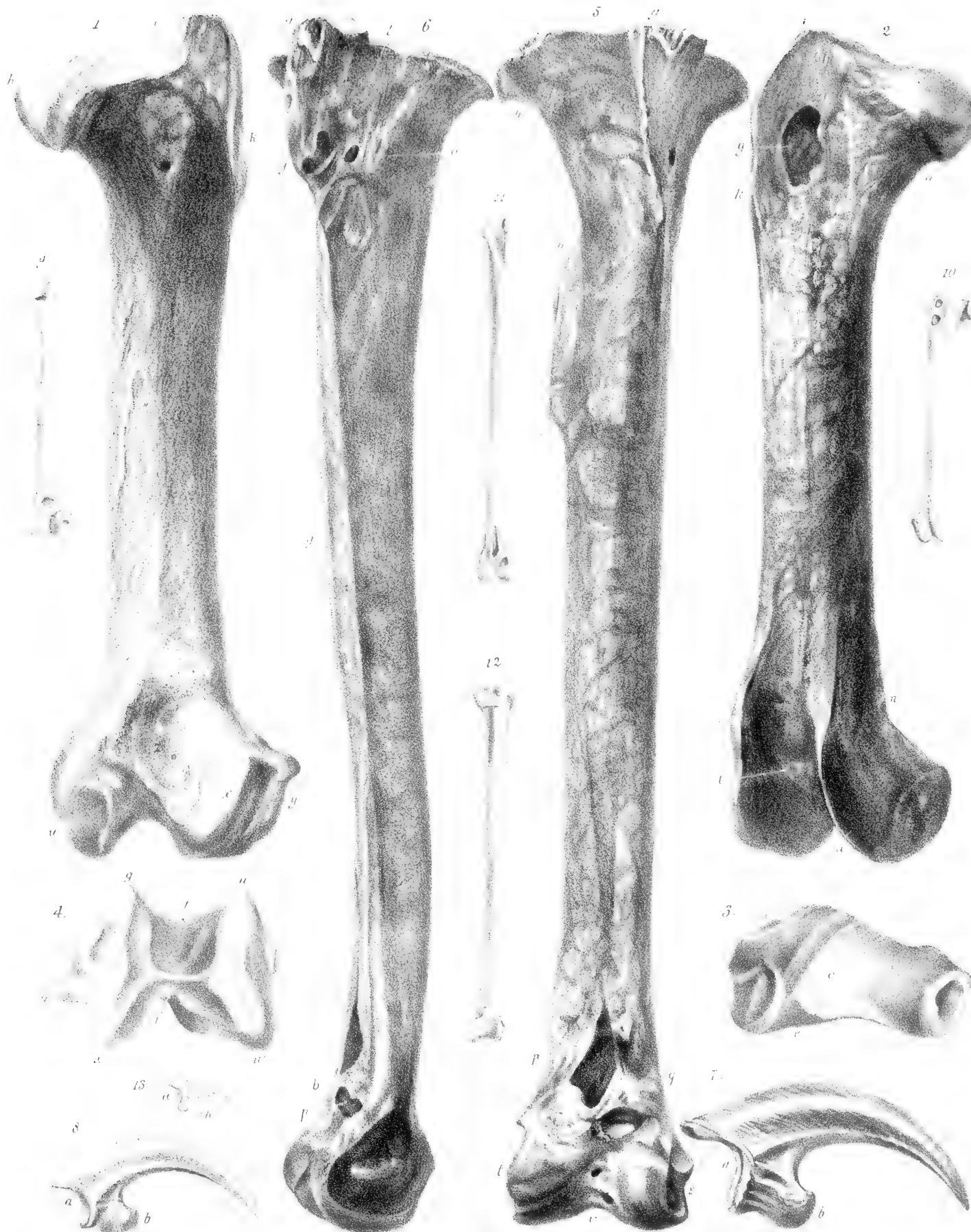


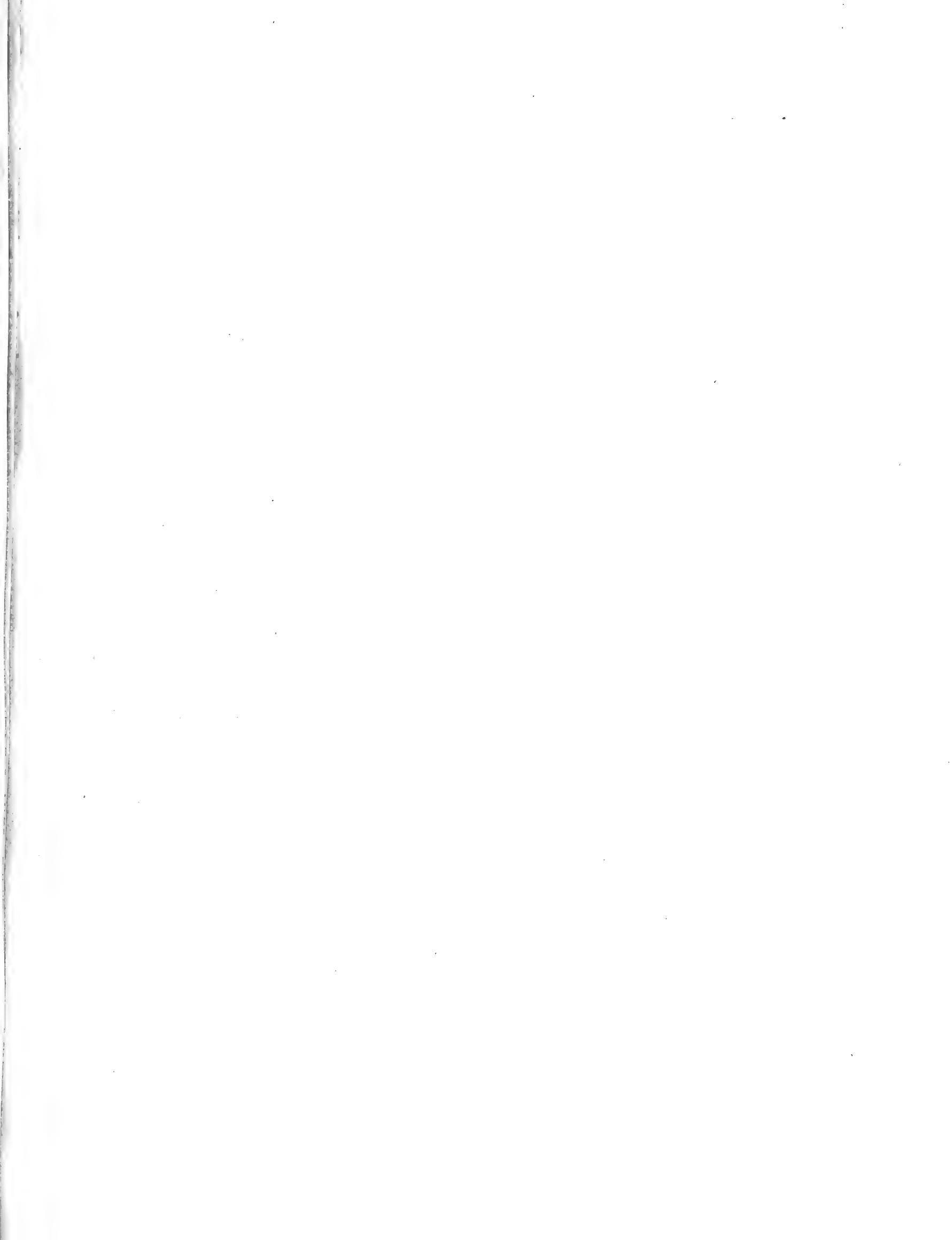






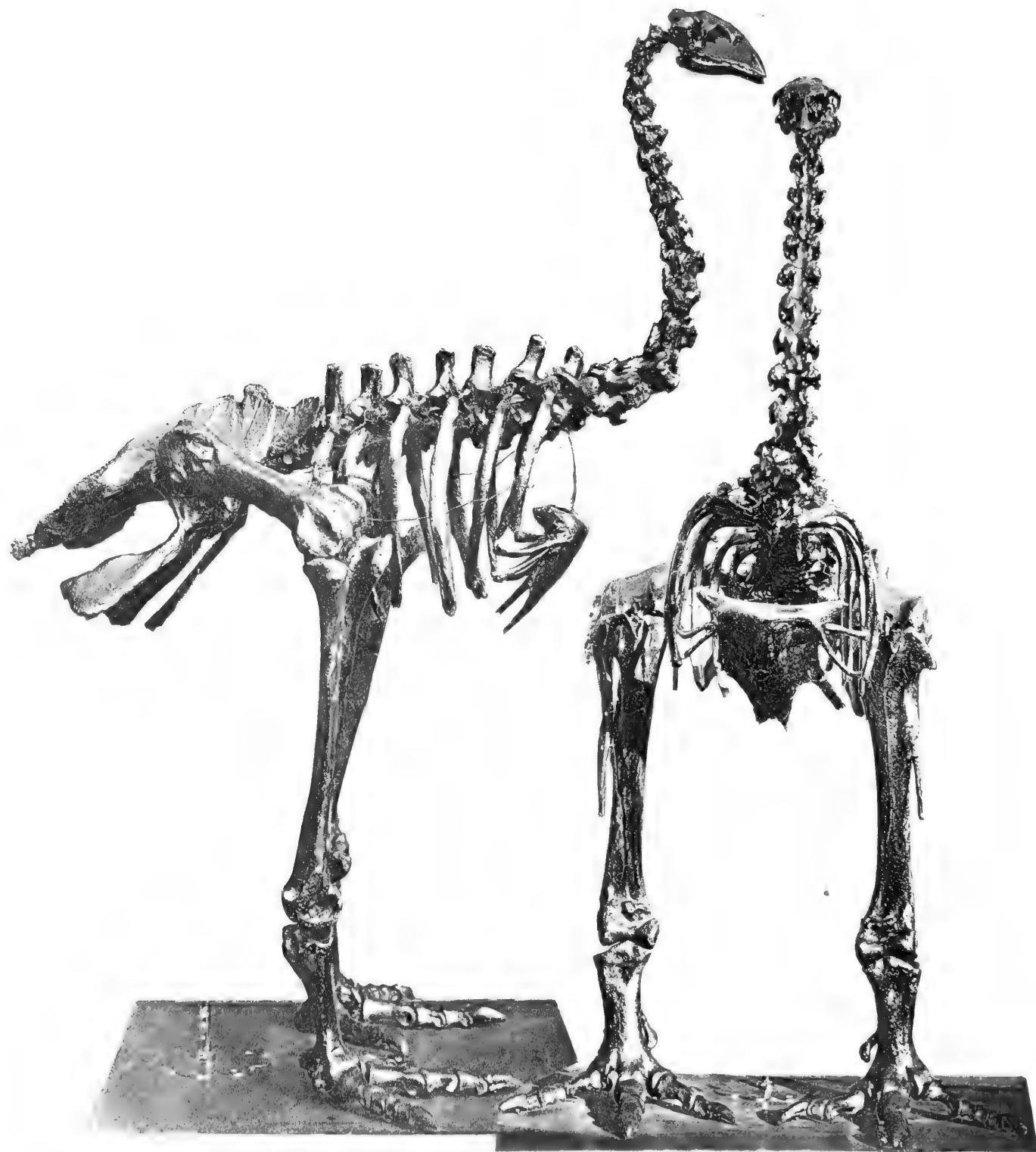








PL. CIX

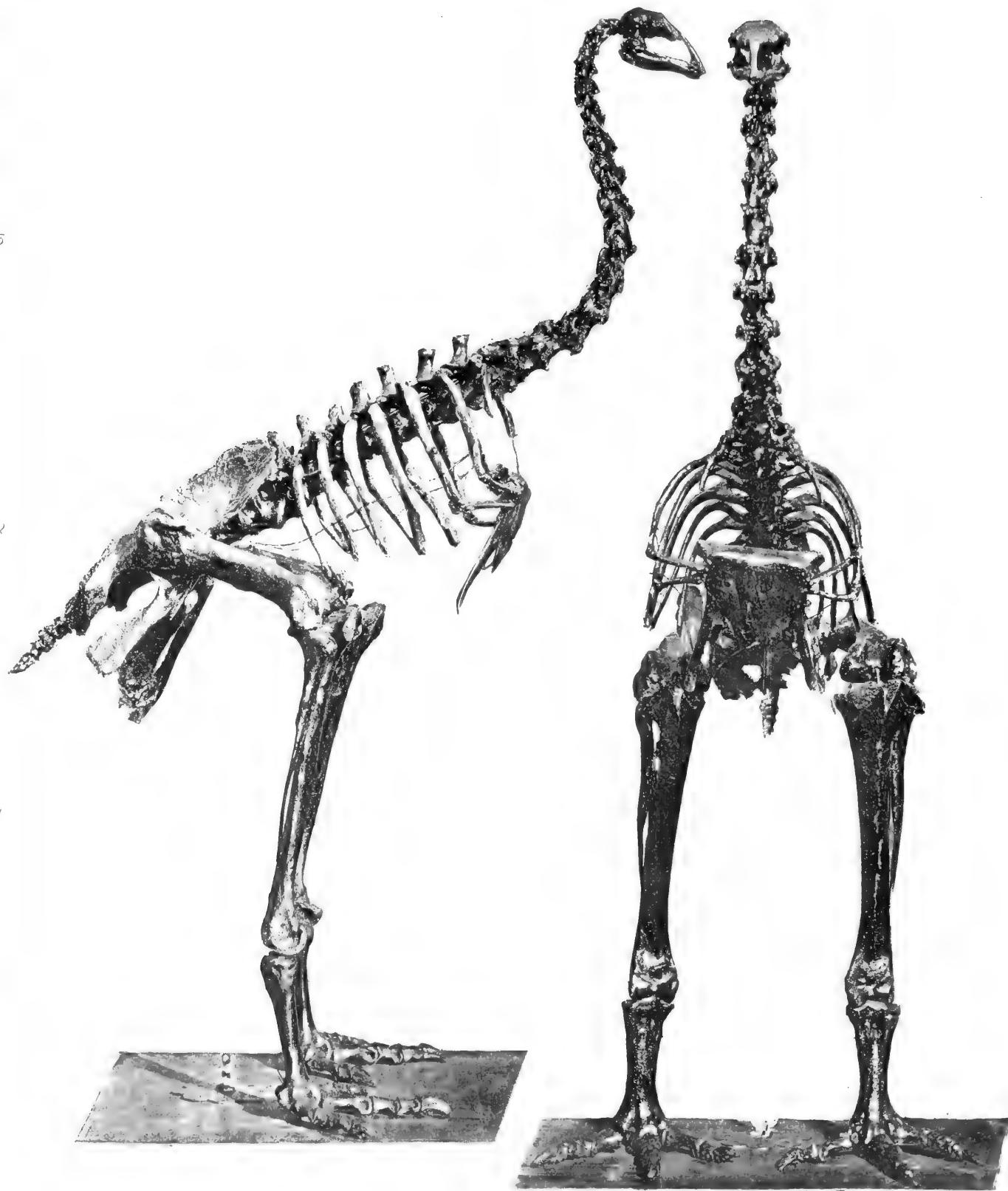




Photogravure Coupil & Cie

Imp^{re} Coupil & Cie

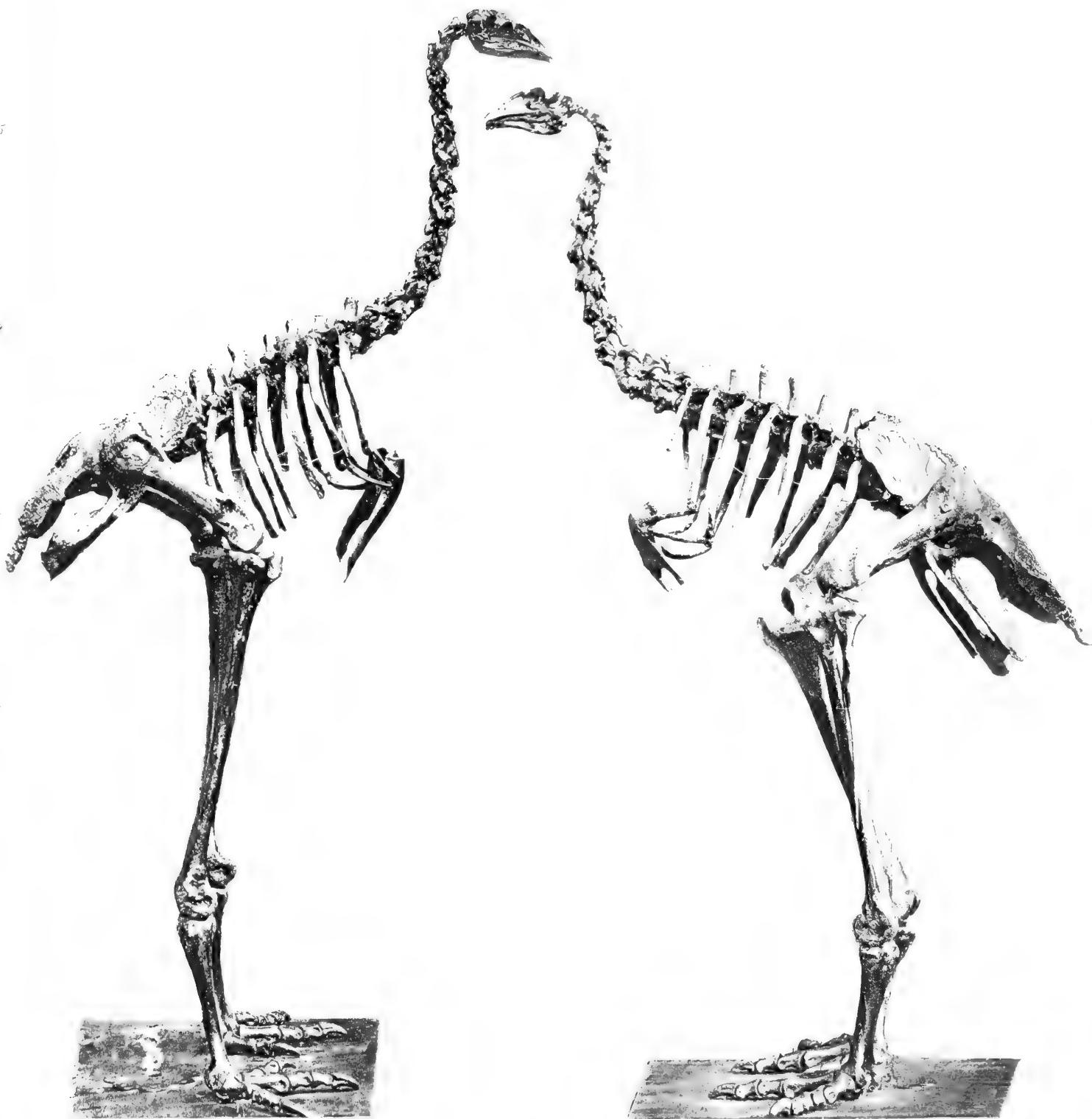
DINORNIS GRAVIS



FIGURAS DILATADAS



PL XXII



ANATOMY

PL. CXIII

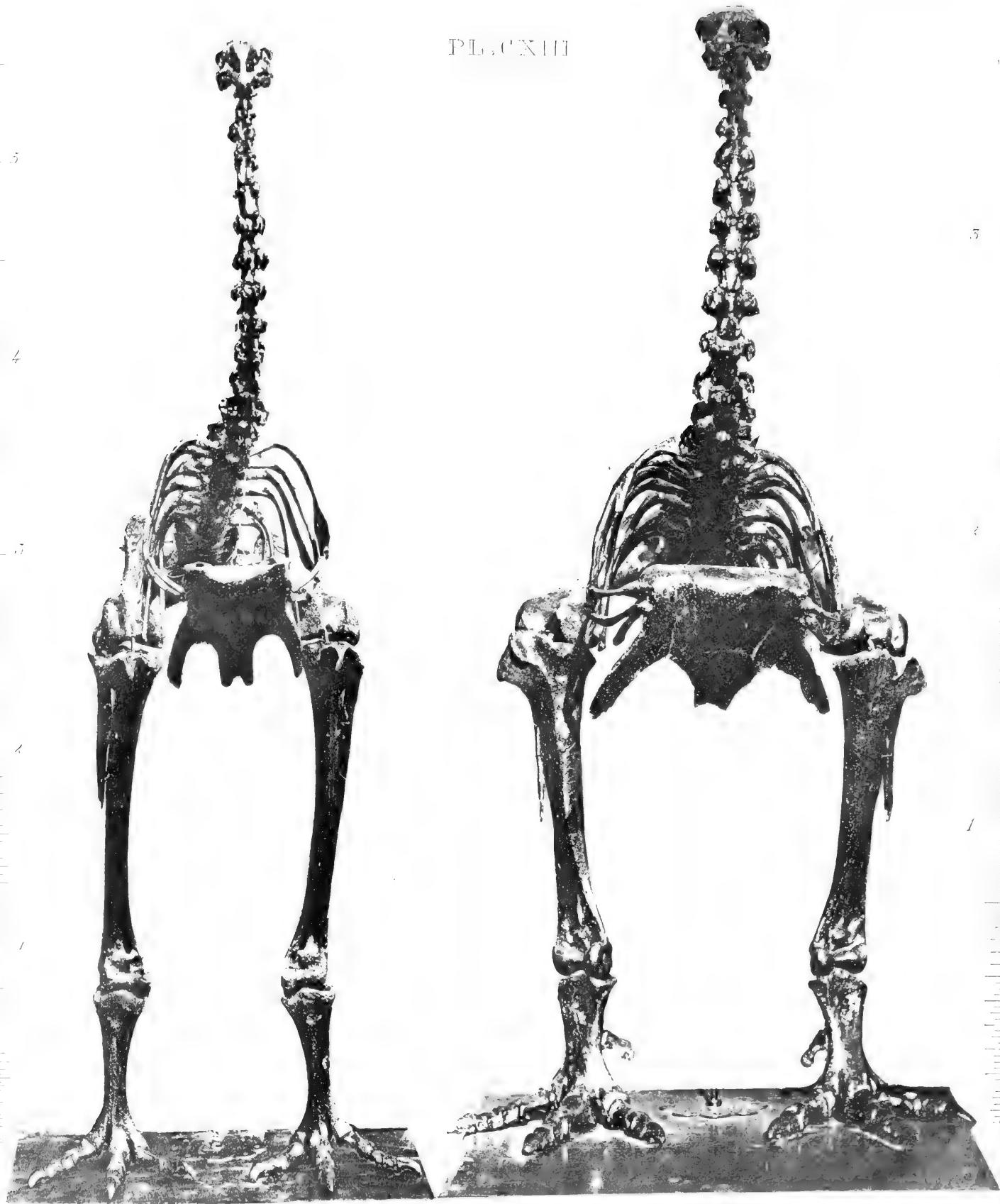
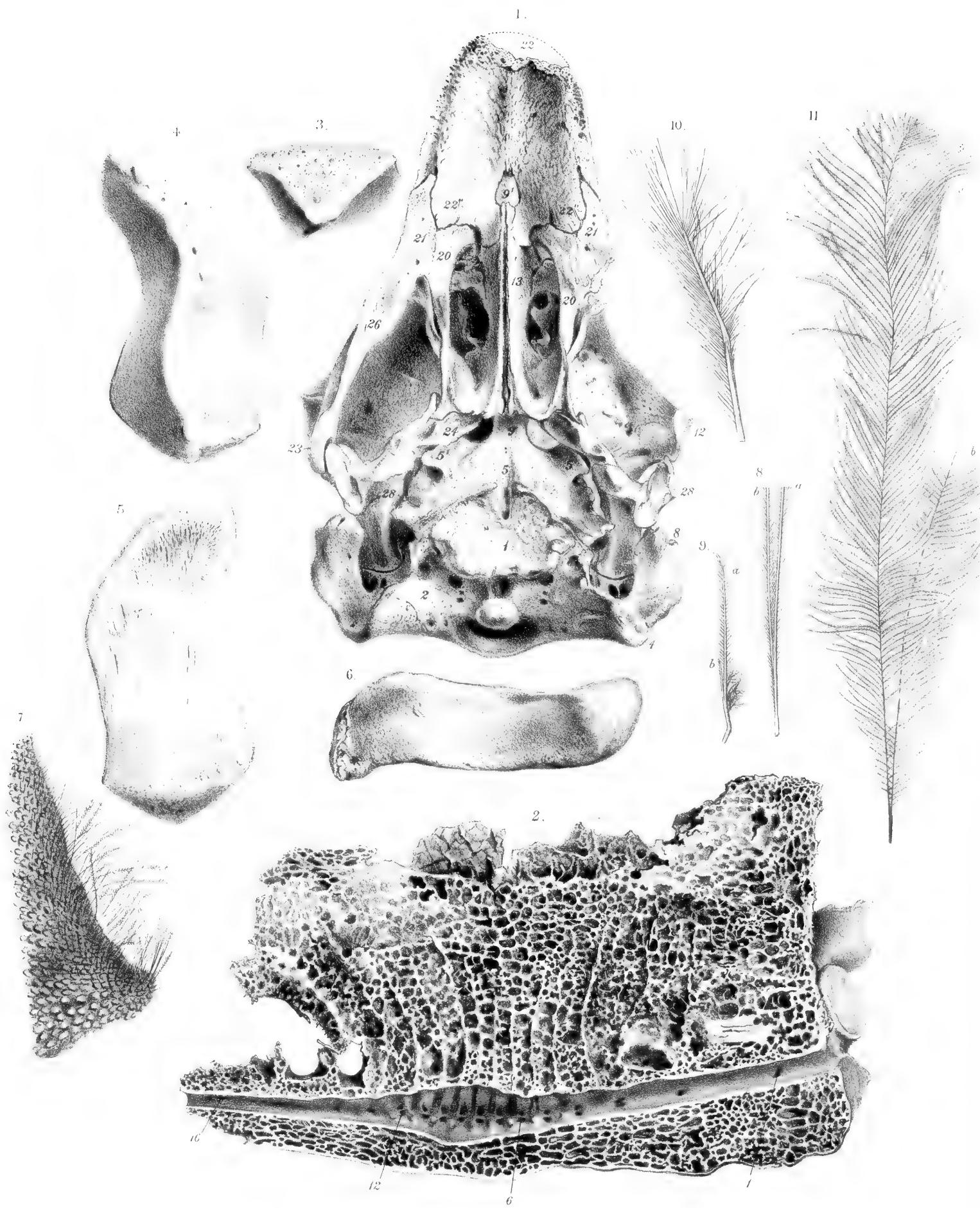
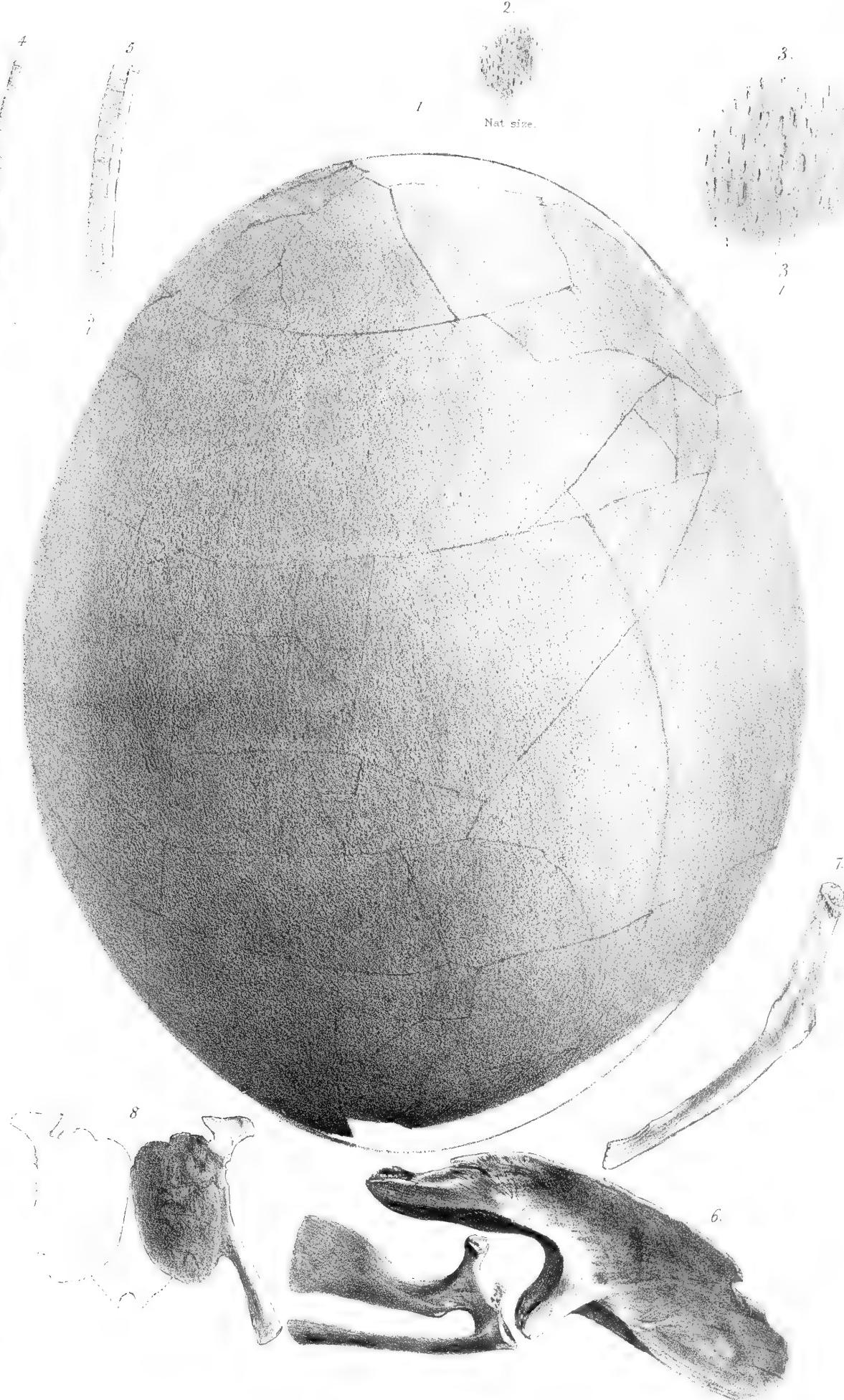


FIGURE 4

FIGURE 5

GRASSUS











Nat. size

Original drawing by Mrs. E. A. M.

M. & N. H. Wood, engr.

EGG OF CHICKEN. NAT. S.



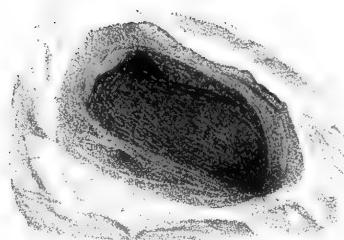
3.



2.



4



5



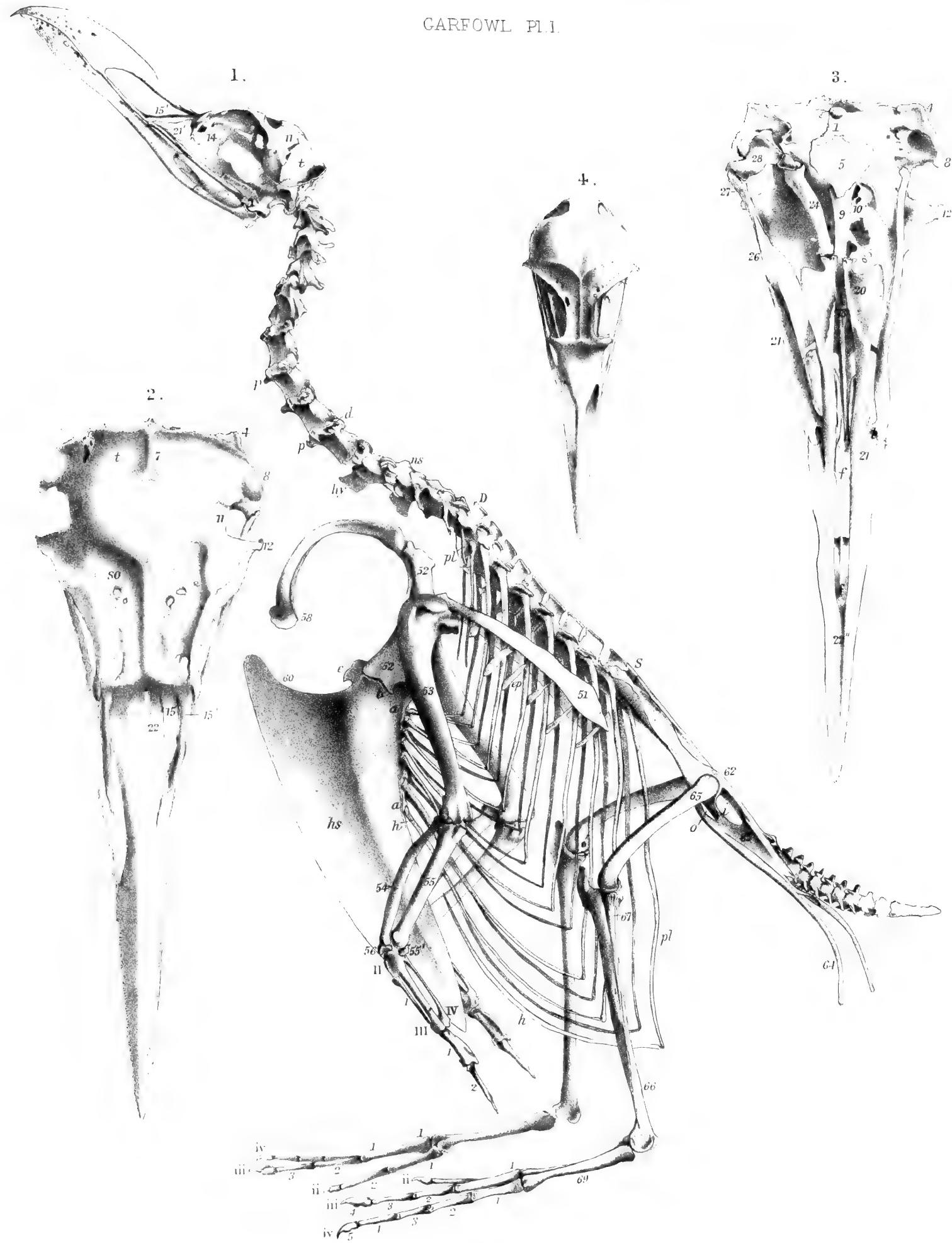
1

7

M. N. Huxley, M.A.



GARFOWL PL. I.

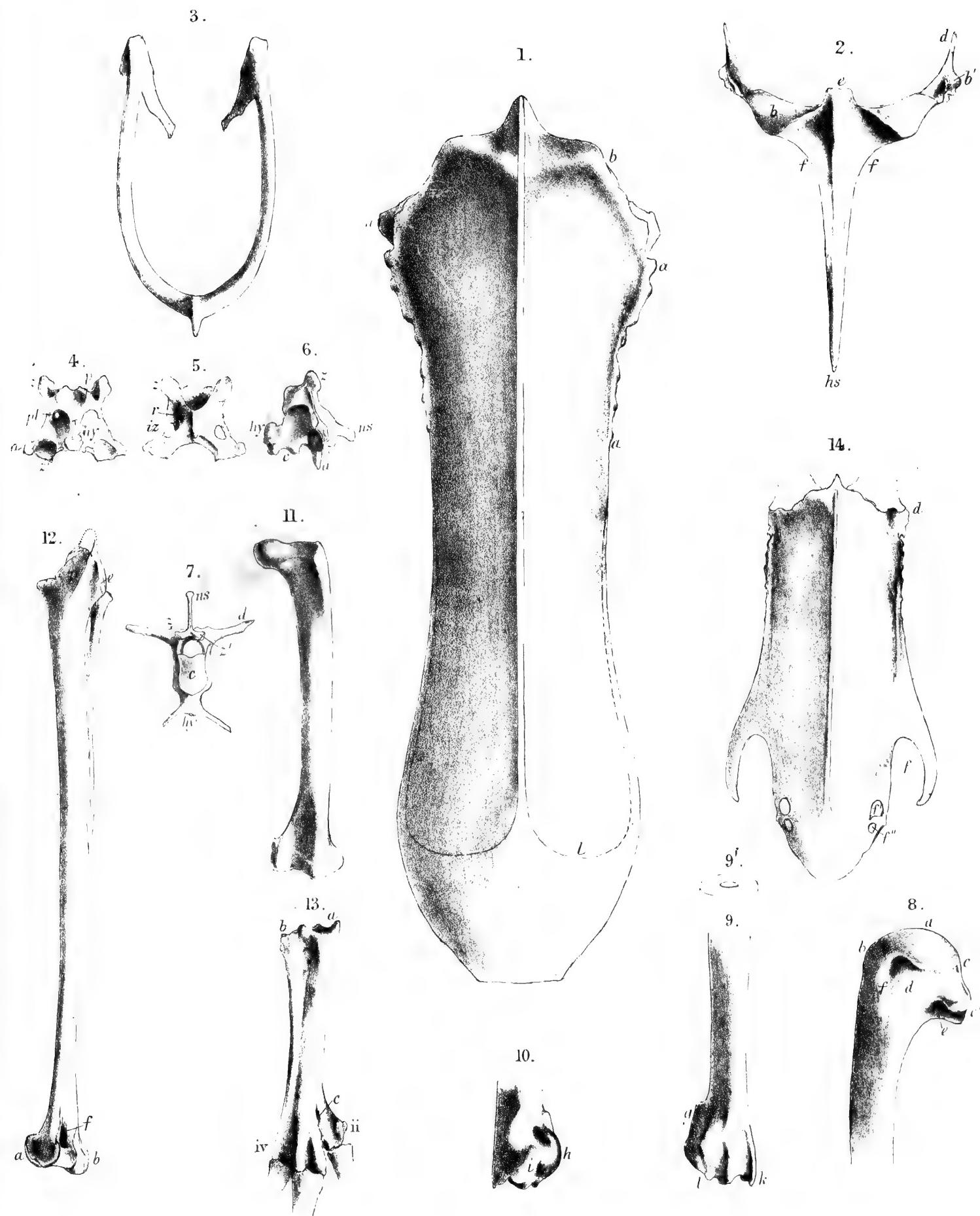


E.A. Smith, del & lith.

W. West, m.p.

FIGS. 1-3. ALCA IMPENNIS. FIG. 4. URIA GRYLLE.









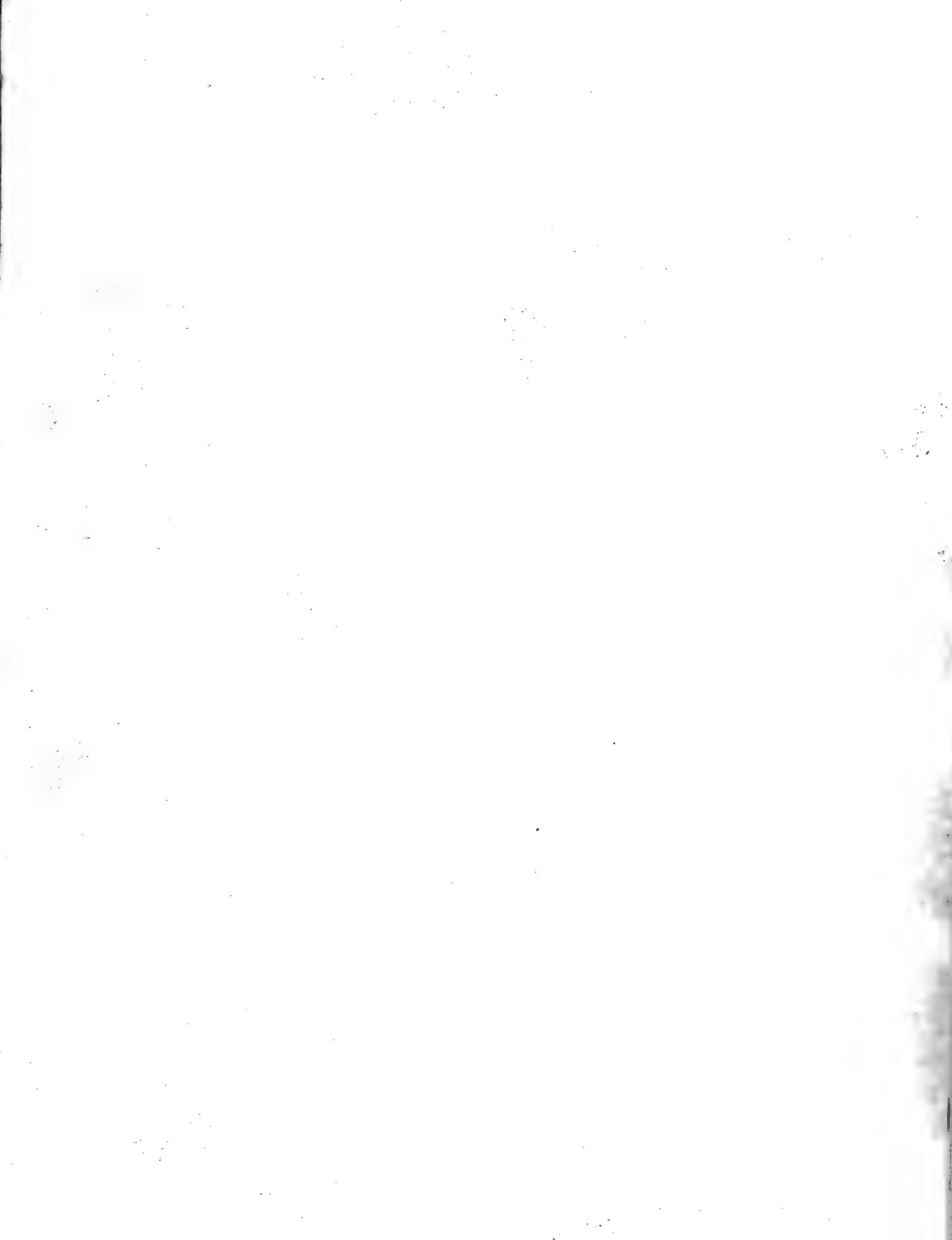
1
3

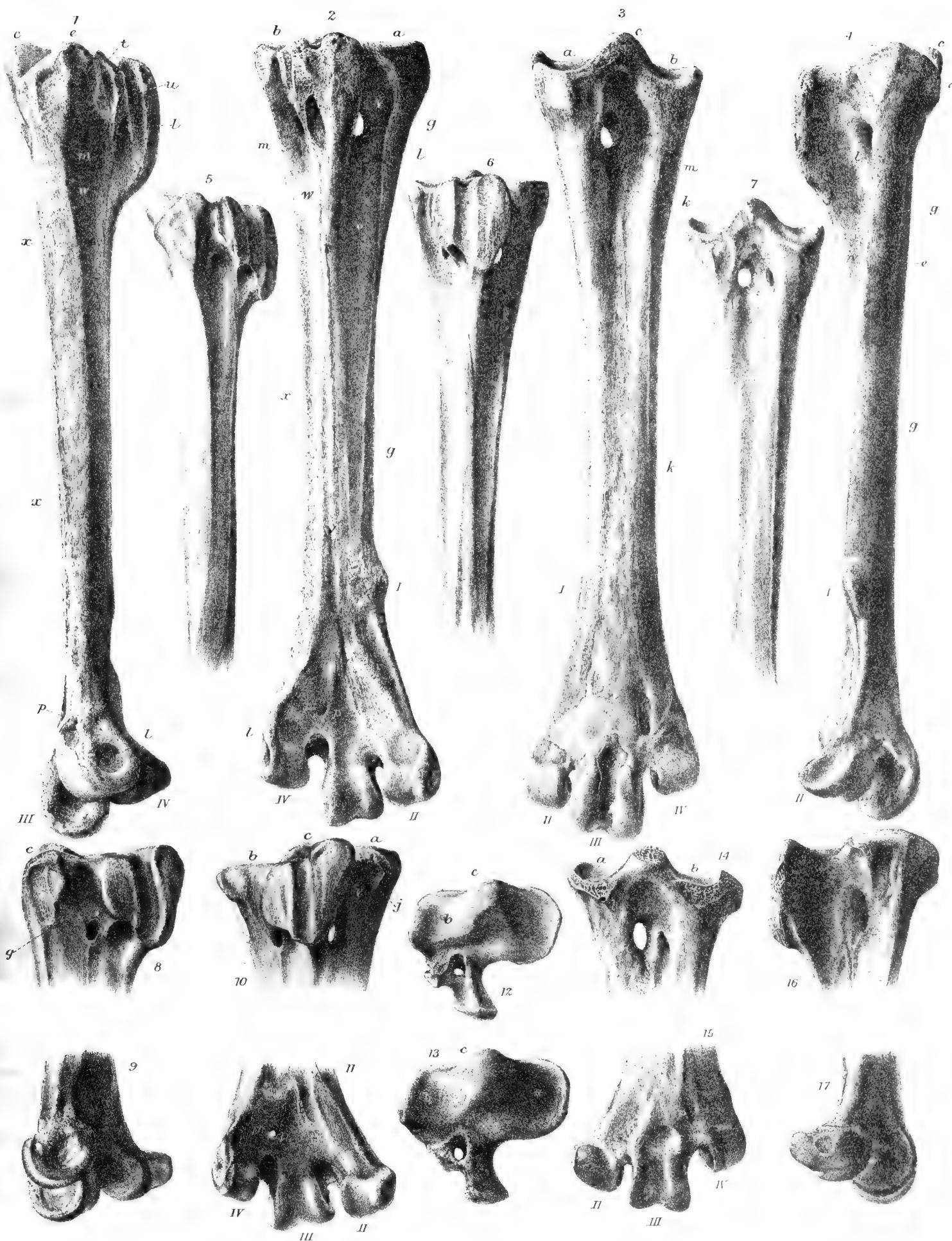


PL. III.



$\frac{1}{3}$





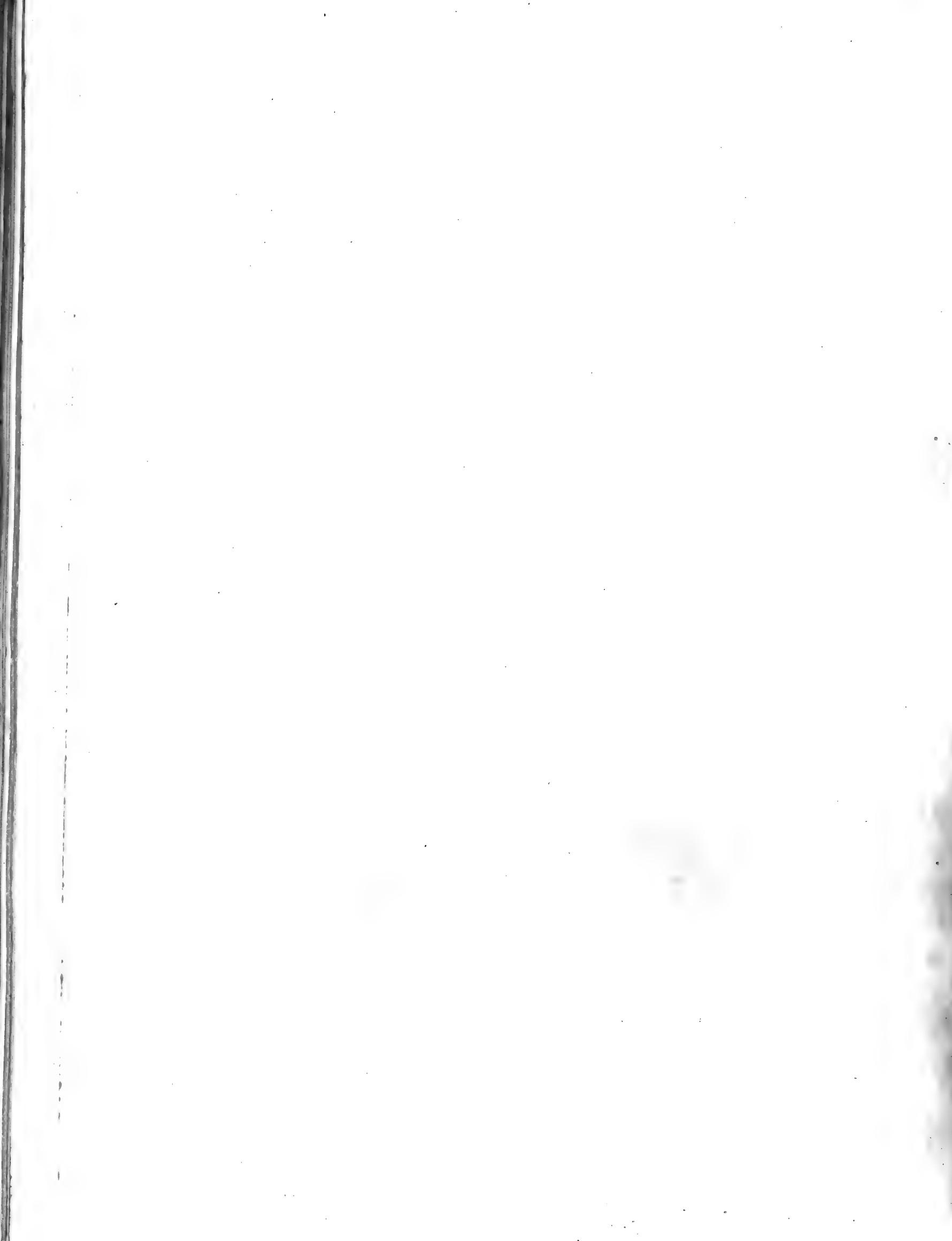


Fig. 1.

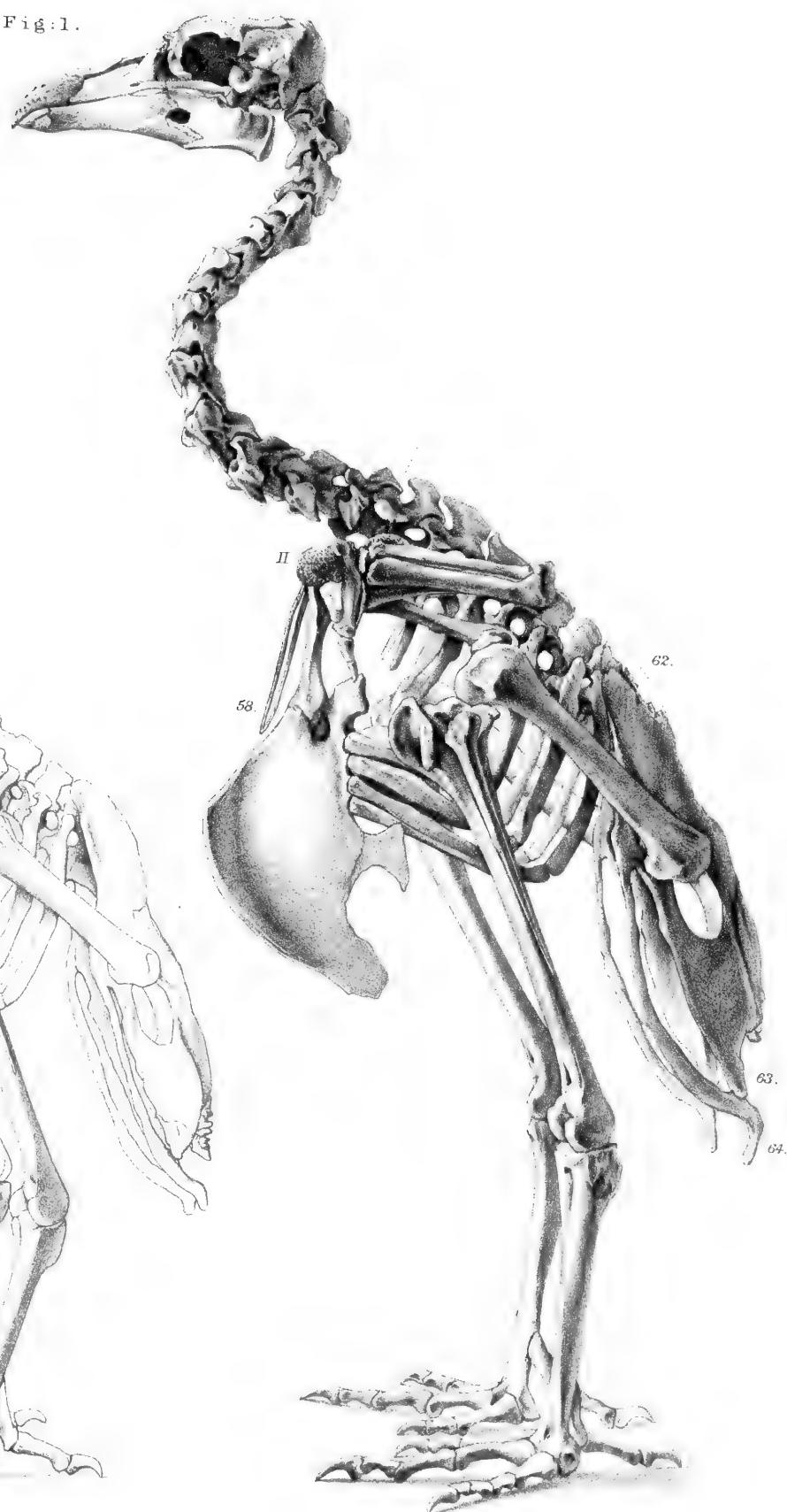


Fig. 2.



C. L. Griesbach.

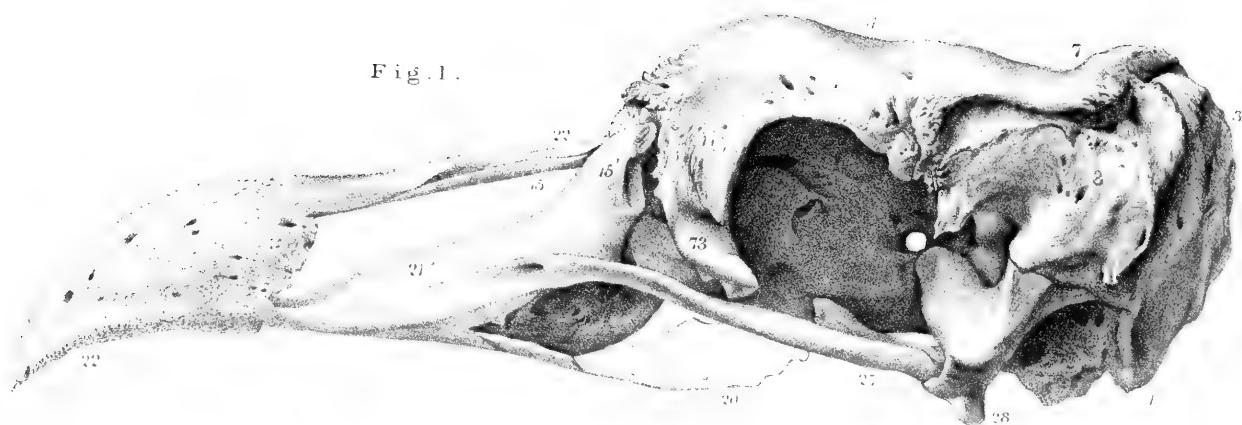
Mintern Bros. imp.

PEZOPHAPS SOLITARIA.
Fig. 1. Male. 2 Female.

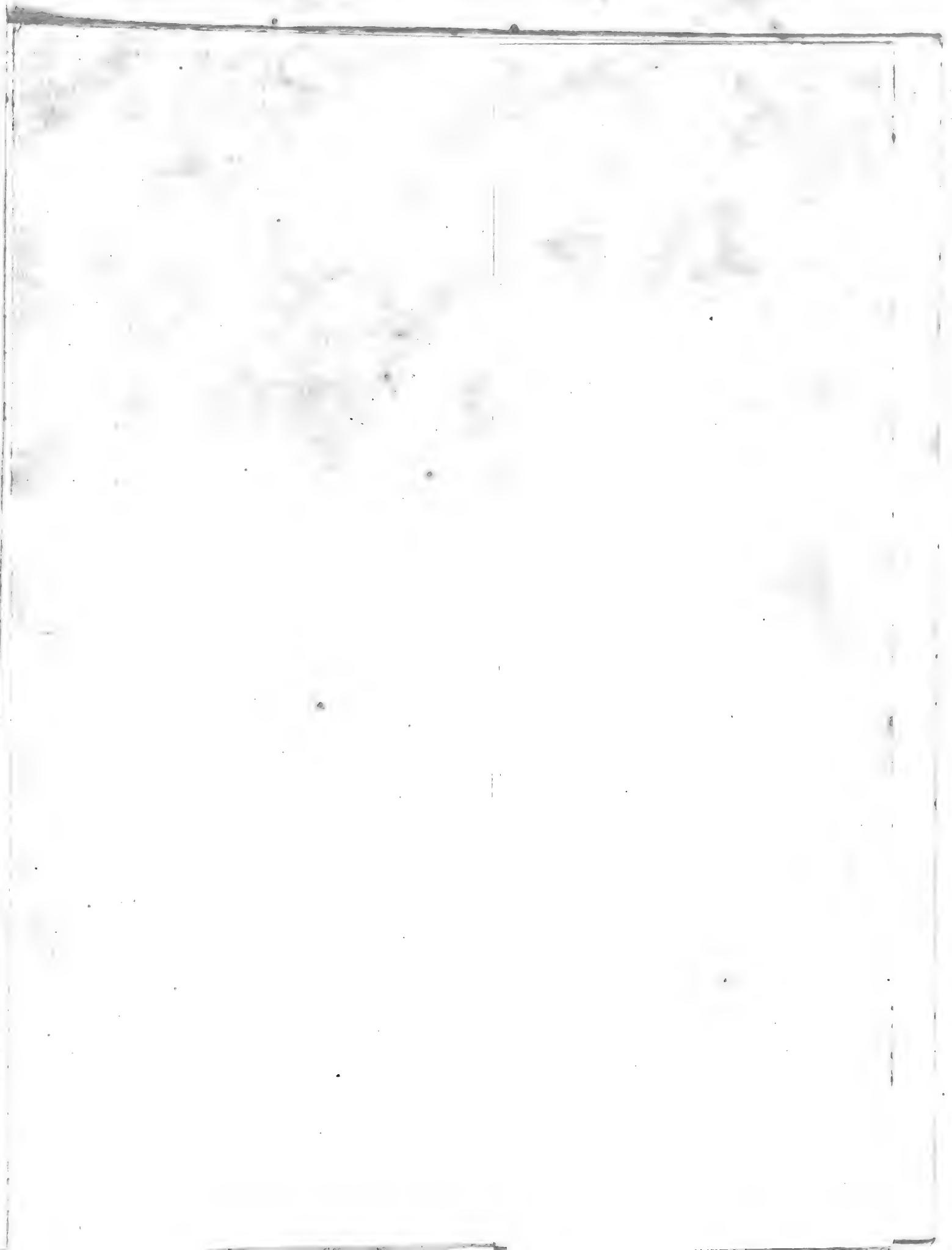


PL. V

Fig. 1.

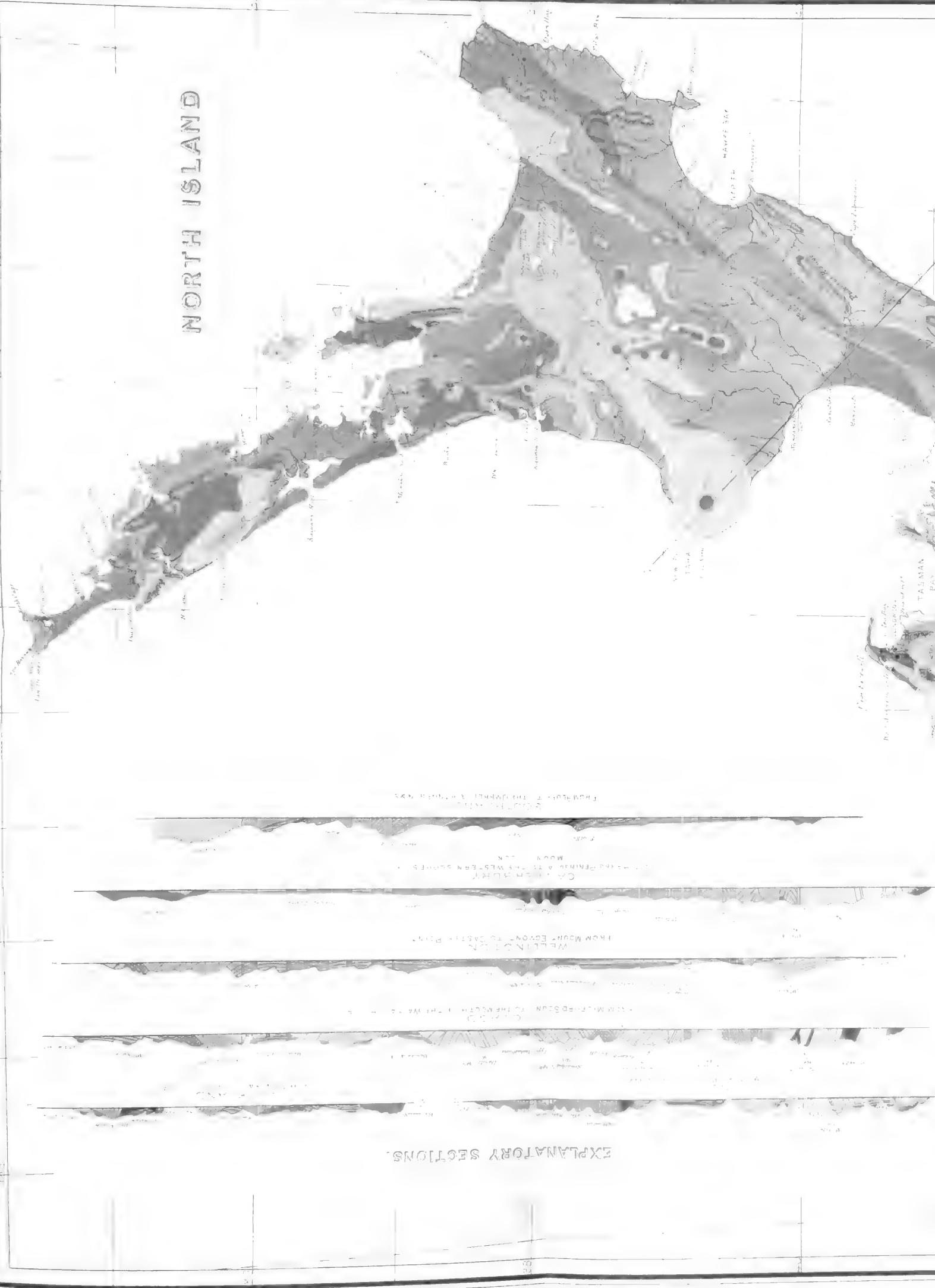








NORTHERN ISLAND



SOUTHERN LARGO

卷之三

and δ are the same as in the previous section. The parameter α is set to 0.05.

$\tau_1, \tau_2, \dots, \tau_n$ are n nodes in F_{d_1, d_2, \dots, d_n} .

卷之三

THE JOURNAL OF CLIMATE

OF NEW ZEALAND

Digitized by srujanika@gmail.com

מְאֵפָרֶת

三
一
九
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